

# CDC WEEKLY KEY MESSAGES

## Coronavirus Disease 2019 (COVID-19) Pandemic **September 26, 2020**

This document summarizes key messages about the COVID-19 outbreak and the response. It will be updated and distributed regularly. For the most current information, visit [www.cdc.gov/coronavirus](http://www.cdc.gov/coronavirus). **Updated content is shown in blue text.**

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## CORONAVIRUS DISEASE 2019 (COVID-19) NAMING

- The International Committee on Taxonomy of Viruses named the novel coronavirus causing an outbreak of respiratory illness that was first detected in Wuhan, Hubei Province, China, Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).
  - Due to potential for confusion with SARS-CoV, where possible, public communications will use “the virus that causes COVID-19.”
- On February 11, the World Health Organization (WHO) named the disease caused by this virus Coronavirus Disease 2019 (COVID-19).
  - **Disease name:** COVID-19

## OUTBREAK SUMMARY

- There is an expanding outbreak of COVID-19 caused by a novel (new) coronavirus.
  - The outbreak began in China but has spread worldwide and is now considered a pandemic.
- Initially, many of the patients reportedly had some link to a large seafood and animal market, suggesting animal-to-person spread. Since then, sustained (ongoing) person-to-person spread in the community has occurred worldwide.
  - CDC provides a list of [international locations](#) that have reported cases of COVID-19.
- The virus that causes COVID-19 is thought to spread mainly from person to person, and mainly through respiratory droplets produced when an infected person coughs or sneezes.
  - These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
  - Spread is more likely when people are in close contact with one another (within about 6 feet).
- The virus can cause illness varying from mild to severe, including illness resulting in death.

## INTERNATIONAL

- Global case numbers are reported by WHO in their [COVID-19 situation reports](#).
  - As of **September 26, 2020**, a total of **32,429,956** cases have been confirmed worldwide.
- On January 30, WHO declared this outbreak a Public Health Emergency of International Concern (PHEIC). A PHEIC is declared if an event poses a public health threat to other nations through the spread of disease and potentially requires a coordinated international response.
- On March 11, WHO announced that the outbreak of COVID-19 can be characterized as a pandemic.

## DOMESTIC

- On January 21, 2020, CDC activated its Emergency Operations Center to support the COVID-19 response.
- On January 31, Health and Human Services Secretary Alex M. Azar II declared a public health emergency for the United States to aid the nation’s healthcare community in responding to COVID-19.
- COVID-19 is a very serious public health threat and the federal government is working closely with state, local, tribal, and territorial partners, as well as public health partners, to respond to this public health threat.
- The goal of the ongoing U.S. public health response is to reduce community spread of this new coronavirus in the United States.
- As the virus continues to spread internationally and in the United States, it becomes harder and harder to contain

its spread.

- On March 13, the President of the United States declared the COVID-19 outbreak a [national emergency](#).

## U.S. OUTBREAK STATISTICS

Cases in the United States as of **September 25**

- Total confirmed and probable cases: **6,958,632**
- Total confirmed and probable deaths: **202,329**
- For demographics data, please see [demographic trends of COVID-19 cases and deaths](#) in the US reported to CDC.

## MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN (MIS-C) STATISTICS

- As of **September 17**, CDC has received reports of **935** cases and **19** deaths potentially from [Multisystem Inflammatory Syndrome in Children \(MIS-C\)](#). These cases and deaths were reported by **42 states** across the United States.
- Due to the small number of cases in most states and out of respect for patients' and their families' privacy, CDC is not reporting individual states' case counts.
  - CDC is closely monitoring characteristics of MIS-C patients such as race, ethnicity and age.
    - To date, more than 70% of MIS-C cases have been Hispanic/Latino or Non-Hispanic Black.
    - Most cases are in children between the ages of 1 and 14 years, with an average age of 8 years.
- CDC lists states reporting any MIS-C cases is available on its [MIS-C case count web page](#).
  - Data are reported voluntarily to CDC by each jurisdiction's health department.
  - This page is updated **every other** Friday.

## SITUATION IN THE U.S.

- [CDC and state and local public health laboratories](#) are testing for the virus that causes COVID-19.
- All 50 states, the District of Columbia, Guam, Puerto Rico, the Northern Mariana Islands, and the Virgin Islands [have reported cases of COVID-19](#) to CDC.
- U.S. COVID-19 cases include
  - Imported cases in travelers
  - Cases among close contacts of a known case
  - Community-acquired cases where the source of the infection is unknown
- Visit CDC's [COVIDView](#) for a weekly summary and interpretation of key indicators that have been adapted to track the COVID-19 pandemic in the United States. On April 15, CDC began posting [demographic characteristics of COVID-19 cases in the United States](#).
- [CDC COVID Data Tracker](#) provides frequently updated surveillance data and contains cumulative counts reported to the CDC since January 21, 2020.
- Long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness, regardless of age. Visit CDC's [People Who Need Extra Precautions](#) website for more information.

## CORONAVIRUS BACKGROUND

- Coronaviruses are a group of viruses that have a halo or crown-like (corona) appearance when viewed under a microscope. They are common in many different species of animals, including camels, cattle, cats, and bats.
- It is rare for animal coronaviruses to become capable of infecting humans and then spreading between people.

- Severe acute respiratory syndrome (SARS-CoV) and Middle East respiratory syndrome (MERS-CoV) are examples of coronaviruses that originated in animals and spread to people.
- It is suspected that the virus that causes the current outbreak of COVID-19 spread from animals to humans.
- Human coronaviruses are a common cause of mild to moderate upper-respiratory illness. But three coronaviruses have emerged to cause more severe illness: Severe Acute Respiratory Syndrome (SARS-CoV), Middle East Respiratory Syndrome (MERS-CoV), and now the virus that causes COVID-19 (SARS-CoV-2).

## TRANSMISSION

- COVID-19 is thought to spread mainly through close contact from person-to-person. Some people without symptoms may be able to spread the virus.
- We are still learning about how the virus spreads and the severity of illness it causes.
- **The virus is thought to spread mainly from person-to-person.**
  - Between people who are in close contact with one another (within about 6 feet).
  - Through respiratory droplets produced when an infected person coughs, sneezes, or talks.
  - These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
  - COVID-19 may be spread by people who are not showing symptoms.
- COVID-19 can be spread by people who do not have symptoms and do not know that they are infected.
  - That's why it's important for everyone to practice [social distancing](#) (staying at least 6 feet away from other people) and wear masks in public settings.
- How easily a virus spreads person-to-person can vary. Some viruses are highly contagious (like measles), while other viruses are less so.
- **The virus that causes COVID-19 is spreading very easily and sustainably between people.**
- Information from the ongoing COVID-19 pandemic suggest that this virus is spreading more efficiently than influenza, but not as efficiently as measles, which is highly contagious.
- It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.
- **Mother-to-child transmission during pregnancy or delivery appears to be rare. Virus transmission to a newborn is thought to occur primarily through respiratory droplets. Current evidence suggests that breast milk isn't likely to spread the virus to babies.**
- Currently, there is no evidence that food is associated with spreading the virus that causes COVID-19. The risk of getting COVID-19 from food you cook yourself or from handling and consuming food from restaurants and takeout or drive-thru meals is thought to be very low.

## SYMPTOMS

- Symptoms may appear 2-14 days after exposure to the virus. People with these symptoms may have COVID-19
  - Fever or chills
  - Cough
  - Shortness of breath or difficulty breathing
  - Fatigue
  - Muscle or body aches
  - Headache

- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea
- This list does not include all possible symptoms. CDC will continue to update this list as more is learned about COVID-19.
- People who have COVID-19 or think they have COVID-19 should watch for these emergency warning signs like
  - Trouble breathing
  - Persistent pain or pressure in the chest
  - New confusion
  - Inability to wake or stay awake
  - Bluish lips or face.
- If someone is showing any emergency warning signs, seek emergency medical care immediately. Call 911 or call ahead to your local emergency facility. Notify the operator that you are seeking care for someone who has or may have COVID-19

## TESTING

- As of **September 25**, a total of **108,609,659** tests have been reported. Of those, **8,586,954** were positive (8%).
- Two kinds of tests are available for COVID-19: viral tests and antibody tests.
  - A viral test tells you if you have a current infection.
  - An antibody test might tell you if you had a previous infection.
    - But there is a chance that a positive result means you have antibodies from an infection with another virus from the same family of viruses (called coronaviruses).
- An antibody test should not be used to find out if you have a current infection because it can take 1-3 weeks after infection to make antibodies.
- CDC does not know yet if having antibodies to the virus can protect someone from getting infected with the virus again or how long that protection might last.
- **On September 18, 2020, CDC updated the testing guidance to provide further clarity, reinforcing the need to test people who aren't showing symptoms, including people who have had close contact with someone who has COVID-19.**

## RESULTS

- **If you test positive for COVID-19 by a viral test**, know what steps to take [if you are sick](#).
  - Most people have mild COVID-19 illness and can recover at home without medical care. Contact your healthcare provider if your symptoms are getting worse or if you have questions about your health.
- **If you test negative for COVID-19 by a viral test**, you probably were not infected at the time your sample was collected. However, that does not mean you will not get sick.
  - The test result only means that you did not have COVID-19 at the time of testing.
  - You could also be exposed to COVID-19 after the test and then get infected and spread the virus to others.
  - If you have symptoms later, you may need another test to determine if you are infected with the virus that causes COVID-19.

- If you test positive or negative for COVID-19, no matter the type of test, you still should take steps to [protect yourself and others](#).

## VIRAL TESTING

- CDC developed a real-time reverse transcription polymerase chain reaction (rRT-PCR) test to detect the genetic material of the virus that causes COVID-19 (SARS-CoV-2) in respiratory samples.
- CDC's newest laboratory test will detect two types of influenza viruses (A and B) and SARS-CoV-2 at the same time. This test is called the CDC Influenza SARS-CoV-2 (Flu SC2) Multiplex Assay.
  - The U.S. Food and Drug Administration (FDA) issued an [Emergency Use Authorization](#) (EUA) for use of the Flu SC2 Multiplex Assay on July 2, 2020.
  - A single test that diagnoses current infection with one or more of these viruses will allow public health laboratories to continue influenza surveillance while they test for SARS-CoV-2.
  - Use of this new test will also allow laboratories to conserve important testing materials that are in short supply [and evaluate three common causes of respiratory illness with a single test](#).
  - The use of this specialized test will focus on public health surveillance efforts and will not replace any COVID-19 tests currently used in commercial laboratories, hospitals, clinics, and other healthcare settings.
- CDC is conducting laboratory testing using PCR in laboratories at its headquarters in Atlanta. CDC can test approximately 1,000 specimens per day.
  - 11 commercial laboratories, including large reference facilities at ARUP, Mayo Clinic Laboratories, Quest Diagnostics, Lab Corp, BioReference Laboratories, and Sonic Healthcare, can test approximately 500,000 tests per day. Additional commercial laboratories are also standing up testing, increasing the nation's testing capacity.
  - In addition, FDA has issued many EUAs for commercial manufacturers to distribute COVID-19 diagnostic tests, including a point-of-care test that can deliver results in as little as 30 minutes.
  - Acceptable respiratory samples vary considerably among authorized diagnostic tests, with some only able to test specific specimen types.

## ANTIBODY TESTING

- Antibody tests check a sample of a person's blood to look for antibodies to SARS-CoV-2. These antibodies may be produced when someone has been infected, so a positive result from this test may indicate that the person was previously infected with the virus.
- We do not know yet if the antibodies that result from infection with SARS-CoV-2 can protect someone from a repeat infection with this virus or how long antibodies to the virus may protect someone. Scientists are conducting studies to answer these questions.
- Antibody tests may not be able to tell you if you are currently infected because it typically takes 1-3 weeks after infection to develop antibodies to SARS-CoV-2. To tell if you are currently infected, you need a viral test that uses samples from your respiratory system.
- Antibody tests are not recommended to diagnose someone with a current infection.
- Antibody tests are required to have an [Emergency Use Authorization](#) from FDA. As of [September 16](#), FDA has authorized [45 antibody tests](#) for emergency use.

## TREATMENT

- There is no specific antiviral treatment for COVID-19. People with COVID-19 should receive supportive care to help

relieve symptoms.

- Most people have mild illness and are able to recover at home.
- For severe cases, treatment should include care to support vital organ functions.

## PREVENTION

- There is currently no vaccine to prevent COVID-19. The best way to prevent infection is to avoid being exposed to the virus.
- CDC recommends preventive actions to [protect yourself and others](#)
  - Wash your hands often with soap and water for at least 20 seconds, especially after blowing your nose, coughing or sneezing; going to the bathroom; and before eating or preparing food.
    - If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol.
    - Always wash hands with soap and water if hands are visibly dirty.
  - Avoid touching your eyes, nose, and mouth with unwashed hands.
  - Avoid close contact.
    - Inside your home: Avoid close contact with people who are sick.
    - Outside your home: Put 6 feet of distance between yourself and people who don't live in your household.
  - Cover your mouth and nose with a mask when around others.
    - Wear a mask in public settings and when around people who don't live in your household, especially when other social distancing measures are difficult to maintain.
  - Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
  - Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe.
  - Monitor your health daily
    - Be alert for [symptoms](#)— fever, cough, shortness of breath, or other symptoms of COVID-19.

## SOCIAL DISTANCING

- [Social distancing](#), also called “physical distancing,” means keeping space between yourself and other people outside of your home.
- To practice social or physical distancing stay at least 6 feet (about 2 arms' length) from other people.
- People can spread the virus before they know they are sick, so stay away from others when possible, even if you—or they—have no symptoms.
  - Limit close contact with others outside your household in indoor and outdoor spaces.
- Social distancing is especially important for [people who are at higher risk for severe illness](#) from COVID-19.

## MASKS

- CDC recommends that people [wear masks](#) in public settings when around people not living in their household, especially when other [social distancing](#) measures are difficult to maintain.
- Masks are most likely to reduce the spread of COVID-19 when they are widely used by people in public settings.
- CDC's recommendation is based on what is known about the role respiratory droplets play in the spread of the virus that causes COVID-19. The recommendation also is based on [emerging evidence](#) from clinical and laboratory studies that shows masks reduce the spray of droplets when worn over the nose and mouth.

- COVID-19 spreads mainly among people who are in close contact with one another (within about 6 feet).
- The use of masks is particularly important in settings where people are close to each other or where social distancing is difficult to maintain.
- People who are sick or know that they have COVID-19 should stay home, but COVID-19 also can be spread by people who do not have symptoms and do not know that they are infected.
  - That's why it's important for everyone to stay at least 6 feet away from other people and wear masks in public places.
  - Masks provide an extra layer to help prevent your respiratory droplets from traveling in the air and onto other people.
- Children under the age of 2 or anyone who has trouble breathing should not wear a mask.
- While masks are strongly encouraged to reduce the spread of COVID-19, CDC recognizes there are specific instances when wearing a mask may not be feasible. In these instances, [adaptations and alternatives](#) should be considered whenever possible.

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## HOW TO WEAR YOUR MASK

- Wash your hands before putting on your mask
- Put it over your nose and mouth and secure it under your chin
- Try to fit it snugly against the sides of your face
- Make sure you can breathe easily

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## HOW TO TAKE OFF YOUR MASK

- Untie the strings behind your head or stretch the ear loops
- Handle only by the ear loops or ties
- Fold outside corners together
- Place covering in the washing machine (learn more about [how to wash masks](#))
- Be careful not to touch your eyes, nose, and mouth when removing and wash hands immediately after removing.

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## HOW TO CLEAN AND DRY YOUR MASK

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### WASHING

- Washing machine
  - You can include your mask with your regular laundry.
  - Use regular laundry detergent and the warmest appropriate water setting for the cloth used to make the mask.
- Washing by hand
  - Prepare a bleach solution by mixing
    - 5 tablespoons (about 1/3 cup) of household bleach per gallon of room temperature water or
    - 4 teaspoons of household bleach per quart of room temperature water.

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### DRYING

- Make sure to completely dry your mask after washing.
  - Dryer
    - Use the highest heat setting and leave in the dryer until completely dry.



- Air dry
  - Lay flat and allow to completely dry. If possible, place mask in direct sunlight.

## HANDWASHING

- Handwashing is one of the best ways to protect yourself and your family from getting sick.
- Clean hands can stop germs from spreading from one person to another and throughout an entire community—from your home and workplace to childcare facilities.
- Wash your hands often with soap and water for at least 20 seconds, especially after blowing your nose, coughing, or sneezing; going to the bathroom; and before eating or preparing food.
- If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol.
- Always wash hands with soap and water if hands are visibly dirty.
- Follow these steps to make sure you wash your hands properly:
  1. Wet your hands with clean, running water (warm or cold), turn off the tap, and apply soap.
  2. Lather your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails.
  3. Scrub your hands for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song from beginning to end twice.
  4. Rinse your hands well under clean, running water.
  5. Dry your hands using a clean towel or air dry them.

## CLEANING AND DISINFECTING YOUR HOME

- **Clean your home.**
  - Wear reusable or disposable gloves for routine cleaning and disinfection.
  - Clean surfaces using soap and water, then use disinfectant.
  - Clean frequently touched surfaces, including tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.
- **Disinfect your home.**
  - Use an [EPA-registered household disinfectant](#) in a room with good airflow.
  - Follow the instructions on the label.
  - Wear gloves and eye protection for potential splash hazards.
  - Avoid mixing chemical products.
  - Store chemicals out of the reach of children and pets.
- You should never eat, drink, breathe, or inject cleaning and disinfecting products into your body or apply them directly to your skin—this can cause serious harm.
- Do not wipe or bathe pets with these products or any other products that are not approved for animal use.
- Do not use disinfectants designed for hard surfaces, such as bleach or ammonia, on food packaged in cardboard or plastic wrap.
- Do not wash produce with soap, bleach, sanitizer, alcohol, disinfectant or any other chemical.

## PROTECT YOURSELF WHILE RUNNING ERRANDS

- CDC provides information to help people make [decisions about going out](#) and recommendations for how to protect themselves.
- When [shopping and running other errands](#)
  - Stay at least 6 feet away from others while shopping and in lines.

- Cover your mouth and nose with a [mask](#) when you have to go out in public.
- Go during hours when fewer people will be running errands.
- If you are [at higher risk for severe illness](#), find out if stores have special hours for people at higher risk.
- Disinfect the shopping cart, use disinfecting wipes if available.
- Do not touch your eyes, nose, or mouth.
- If possible, use touchless payment (pay without touching money, a card, or a keypad). If you must handle money, a card, or use a keypad, use hand sanitizer right after paying.
- When you get home, wash your hands with soap and water for at least 20 seconds.
- When unpacking groceries
  - Unpack safely at home
  - Currently, the risk of infection from SARS-CoV-2, the virus that causes COVID-19, from food products, food packaging, or bags is thought to be low. However, it is always important to follow good food safety practices.
  - When unpacking groceries, refrigerate or freeze meat, poultry, eggs, seafood, and other perishables within 2 hours of purchasing.
  - Do not use disinfectants designed for hard surfaces, such as bleach or ammonia, on food packaged in cardboard or plastic wrap.
  - After unpacking groceries, wash your hands with soap and water for at least 20 seconds. If soap and water are not available, use a hand sanitizer that contains at least 60% alcohol.
- Regularly clean and disinfect kitchen counters using a commercially available disinfectant product external icon or a DIY disinfecting solution.
- When banking
  - Bank online whenever possible.
  - Use drive-thru banking services, automated teller machines (ATM), or mobile banking apps for routine transactions that do not require face-to-face assistance as much as possible.
  - Wear a [mask](#) when doing any in-person exchanges.
  - Use hand sanitizer after any deposit, withdrawal, exchange, drive-thru visit, or use of an ATM.
  - Wash your hands thoroughly when you arrive home or to your destination or somewhere with soap and water
- When getting gas
  - Use disinfecting wipes on handles and buttons before you touch them (if available).
  - After fueling, use a hand sanitizer with at least 60% alcohol.
  - Wash your hands for at least 20 seconds when you get home or somewhere with soap and water.
- Deliveries and Takeout
  - Limit in person contact if possible
    - Pay online or on the phone when you order (if possible).
    - Accept deliveries without in-person contact whenever possible. Ask for deliveries to be left in a safe spot outside your house (such as your front porch or lobby), with no person-to-person interaction. Otherwise, stay at least 6 feet away from the delivery person.
  - Wash your hands or use hand sanitizer after accepting deliveries or collecting mail
    - After receiving your delivery or bringing home your takeout food, wash your hands with soap and water for 20 seconds. If soap and water are not available, use a hand sanitizer with at least 60% alcohol.
    - After collecting mail from a post office or home mailbox, wash your hands with soap and water for at least 20 seconds or use a hand sanitizer with at least 60% alcohol.

## DOCTOR VISITS AND GETTING MEDICINE

- Do not delay care you need to manage medical conditions or address new health issues.
  - Talk to your doctor online, by phone, or through e-mail when possible.
  - If you must visit in-person, [protect yourself and others](#).
  - If you need emergency medical care, seek it immediately.
- Parents should make sure their children receive on-time vaccinations, so they continue to be protected from deadly vaccine-preventable diseases.
  - Call your pediatrician's office to learn about safety protocols in place to offer well-child visits during this outbreak
- When picking up medicines, use drive-thru windows, curbside services (prescriptions brought to you in your car), mail-order, or other delivery services.

## PEOPLE AT RISK FOR SERIOUS ILLNESS

- Based on what is known now, those at [higher-risk for severe illness](#) from COVID-19 are
  - Older adults
    - As you get older, your risk for severe illness from COVID-19 increases.
    - For example, people in their 50s are at higher risk for severe illness than people in their 40s.
    - People in their 60s or 70s are, in general, at higher risk for severe illness than people in their 50s.
    - The greatest risk for severe illness from COVID-19 is among those aged 85 or older.
    - In the United States, 8 out of 10 reported COVID-19-related deaths have been among adults 65 years and older.
  - **Adults** of any age with the following conditions **are at increased risk** of severe illness from COVID-19:
    - [Cancer](#)
    - [Chronic kidney disease](#)
    - [COPD \(chronic obstructive pulmonary disease\)](#)
    - [Immunocompromised state \(weakened immune system\) from solid organ transplant](#)
    - [Obesity \(body mass index \[BMI\] of 30 or higher\)](#)
    - [Serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies](#)
    - [Sickle cell disease](#)
    - [Type 2 diabetes mellitus](#)
- COVID-19 is a new disease. Currently there are limited data and information about the impact of underlying medical conditions and whether they increase the risk for severe illness from COVID-19. Based on what CDC knows at this time, **adults** with the following conditions **might be at an increased risk** for severe illness from COVID-19.
  - [Asthma \(moderate-to-severe\)](#)
  - [Cerebrovascular disease \(affects blood vessels and blood supply to the brain\)](#)
  - [Cystic fibrosis](#)
  - [Hypertension or high blood pressure](#)
  - [Immunocompromised state \(weakened immune system\) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines](#)
  - [Neurologic conditions, such as dementia](#)
  - [Liver disease](#)

- [Pregnancy](#)
- [Pulmonary fibrosis \(having damaged or scarred lung tissues\)](#)
- [Smoking](#)
- [Thalassemia \(a type of blood disorder\)](#)
- [Type 1 diabetes mellitus](#)
- [Children](#) who have medical complexity, who have neurologic, genetic, metabolic conditions, or who have congenital heart disease might be at increased risk for severe illness from COVID-19 compared to other children.
- It is especially important for people at increased risk of severe illness from COVID-19, and those who live with them, to protect themselves from getting COVID-19.
  - The best way to [protect yourself](#) and to help reduce the spread of the virus that causes COVID-19 is to
    - Limit your interactions with other people as much as possible.
    - Take precautions to prevent getting COVID-19 when you do interact with others.
    - Keep space between yourself and others (stay 6 feet away, which is about two arm lengths).
    - [Wash your hands](#) often.
    - Avoid touching your eyes, nose, and mouth with unwashed hands.
    - Cover coughs and sneezes with a tissue or the inside of your elbow. Then wash your hands.
    - Take precautions as you go about your [daily life](#) and [attend events](#).
    - [Clean and disinfect surfaces](#) and things you touch often.
  - If you start feeling sick and think you may have COVID-19, get in touch with your healthcare provider within 24 hours.
- If you have an underlying medical condition,
  - Continue your medicines and do not change your treatment plan without talking to your healthcare provider.
  - Have at least a 30-day supply of prescription and non-prescription medicines. [Talk to a healthcare provider](#), insurer, and pharmacist about getting an extra supply (more than 30 days) of prescription medicines, if possible, to reduce your trips to the pharmacy.
  - Do not delay getting emergency care for your underlying medical condition because of COVID-19. Emergency departments have plans in place to protect you from getting COVID-19 if you need care.
  - Call your healthcare provider if you have any concerns about your underlying medical conditions or if you get sick and think that you may have COVID-19. If you need emergency help, call 911 right away.
  - If you don't have a healthcare provider, contact your nearest [community health center](#) or [health department](#).
- It's important to remember that severe illness leading to hospitalization, including ICU admission and death, can occur in people of any age with COVID-19.

## PREGNANT PEOPLE

- Based on what CDC knows at this time, pregnant people might be at an increased risk for severe illness from COVID-19 compared to non-pregnant people.
  - [Analysis of select data from January 22-June 7 showed that pregnant women who are Hispanic or Black might be disproportionately affected by COVID-19 during pregnancy.](#)
- Additionally, there may be an increased risk of adverse pregnancy outcomes, such as preterm birth, among pregnant people with COVID-19.
- Pregnant people should take precautions to prevent getting COVID-19, including limiting interactions with people outside their household as much as possible, frequent handwashing, and wearing a mask.

- Prenatal care appointments should not be skipped.

## MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN

- Multisystem inflammatory syndrome in children (MIS-C) is a condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs.
- CDC and other public health experts are learning more about MIS-C and how it affects children every day.
  - Experts still don't know exactly how MIS-C may be linked to COVID-19 infection.
  - Most children who develop MIS-C have evidence of a prior COVID-19 infection or had contact with someone who was infected.
  - Experts think that MIS-C may be a heightened immune response to the virus that occurs in some children.
  - MIS-C typically begins about two to four weeks after infection with the virus that causes COVID-19. The child may not have shown symptoms and—in some cases—the child and their parents or caregivers may not even know they had been infected.
  - It is not clear why some children who get COVID-19 develop MIS-C and others do not.
- Children with MIS-C may have a fever and a variety of symptoms, including stomach pain, vomiting, diarrhea, neck pain, rash, bloodshot eyes, or feeling extra tired.
  - Not all children with MIS-C have the same symptoms.
  - Contact your child's doctor, nurse, or clinic right away if your child is showing symptoms of MIS-C or symptoms of COVID-19.
  - If your child is showing any emergency warning signs, seek emergency care right away. Emergency warning signs include trouble breathing, persistent pain or pressure in the chest, new confusion, inability to wake or stay awake, bluish lips or face, severe abdominal pain, or other concerning signs
- Parents and caregivers who have concerns about their child's health, including concerns about COVID-19 or MIS-C, should contact a pediatrician or other healthcare provider immediately.
  - Healthcare providers can follow CDC recommendations to keep children and their parents or caregivers safe during in-person visits.
- CDC is working with state and local health departments to gather more information about MIS-C as quickly as possible.
- As new information becomes available, CDC will provide updates to parents and caregivers, healthcare providers, and public health professionals.

## PEOPLE WITH DISABILITIES

- Disability alone may not be related to higher risk for getting COVID-19 or having severe illness. Most people with disabilities are not inherently at higher risk for becoming infected with or having severe illness from COVID-19.
- However, some people with disabilities might be at a higher risk of infection or severe illness because of their underlying medical conditions. All people seem to be at higher risk of severe illness from COVID-19 if they have serious underlying chronic medical conditions like chronic lung disease, a serious heart condition, or a weakened immune system.
- People with certain disability types might be at increased risk of becoming infected or having unrecognized illness.
- People with disabilities may experience potential challenges to routine medical care and access.

## RACIAL & ETHNIC MINORITY GROUPS

- Long-standing systemic health and social inequities have put many people from racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19.

- There is increasing evidence that some racial and ethnic minority groups (particularly Black or African American, Hispanic or Latino, and American Indian or Alaska Native people) are being disproportionately affected by COVID-19. Inequities in the social determinants of health, such as poverty and healthcare access, affecting these groups are interrelated and influence a wide range of health and quality-of-life outcomes and risks.
- A [new report](#) in CDC's MMWR shows that through early July, American Indian and Alaska Native populations had COVID-19 rates that were 3.5 times that of non-Hispanic white people in 23 states where data were available. This disparity, which is likely driven by persistent health inequities among tribal communities, highlights the need for culturally responsive public health efforts to slow the spread of COVID-19 in Indian Country.
- Community- and faith-based organizations, employers, healthcare systems and providers, public health agencies, policy makers, resettlement agencies, and others all have a part in helping to promote fair access to health.
- People from some racial and ethnic minority groups, particularly those who are foreign-born, are disproportionately represented in essential work settings (e.g. farms, factories, and other service-related jobs).
  - Some people who work in these settings have more chances to be exposed to the virus that causes COVID-19. Reasons for this include being a critical worker, having close contact with other workers, sharing transportation, sharing housing environments, not having paid sick days, lacking access to healthcare, having language barriers, and being part of a workforce that moves frequently.

## RURAL COMMUNITIES

- Long-standing systemic health and social inequities have put some rural residents at increased risk of getting COVID-19 or having severe illness.
- Rural areas can face different health challenges depending on where they are located. Each rural community should assess their unique [susceptibility and social vulnerability](#) to COVID-19.
- Rural healthcare infrastructure is limited. Since 2005, [170 hospitals have closed](#) and 700 more are currently at risk of closure. Many rural hospitals have a limited number of hospital beds, ICU beds, or ventilators, which can affect their ability to treat patients with COVID-19.
- [Agriculture, meat, poultry, and other food processing](#) industries are largely located in rural areas. [Occupations in these industries](#) often involve working closer than the recommended 6-foot distance, which puts workers [at increased risk for getting and spreading COVID-19](#).
  - Not only are workers at risk because of the conditions in these industries, but the industries are considered critical and less likely to close, leaving workers little choice but to come to work even when other businesses are shut because of high community transmission.
  - People from some racial and ethnic minority groups, particularly people who are Hispanic or Latino and those who are foreign-born, are disproportionately represented among agriculture and food processing essential workers.
  - [COVID-19 outbreaks among agriculture, meat, poultry, and other food processing facility workers](#) can rapidly affect large numbers of workers and extend into the communities where they live.
  - [Targeted workplace interventions](#) and prevention efforts that are [culturally and linguistically](#) tailored to the groups most affected by COVID-19 are critical to reducing the risk of getting COVID-19 at work.
- Visit CDC's work in Covid-19 in [Rural Communities](#) for more information.

## IF YOU ARE SICK

- Take [steps to help prevent the spread of COVID-19](#) if you are sick.

- Stay home except to get medical care.
- Separate yourself from other people and any animals, including pets.
- Monitor your symptoms.
- Call ahead before visiting your doctor.
- If you are sick, wear a mask over your nose and mouth when you have to be around other people or animals.
- Cover your coughs and sneezes.
- Wash your hands often.
- Avoid sharing personal household items, like dishes, towels, and bedding.
- Clean all “high-touch” surfaces every day.

## WHEN YOU CAN BE AROUND OTHERS AFTER YOU HAD OR LIKELY HAD COVID-19

Depending on your healthcare provider’s advice and availability of testing, you might get tested to see if you still have COVID-19. If you will be tested, [you can be around others](#) after you receive two negative test results in a row, at least 24 hours apart.

- If you think or know you had COVID-19, and you had symptoms
  - You can be with others after
    - 10 days since symptoms first appeared **and**
    - 24 hours with no fever without the use of fever-reducing medications **and**
    - Other symptoms of COVID-19 are improving\*\*Loss of taste and smell may persist for weeks or months after recovery and need not delay the end of isolation
- If you tested positive for COVID-19 but had no symptoms
- If you continue to have no symptoms, you can be with others after 10 days have passed since you had a positive viral test for COVID-19. Most people do not require testing to decide when they can be around others; however, if your healthcare provider recommends testing, they will let you know when you can resume being around others based on your test results.
- [If you were](#) severely ill with COVID-19 or have a severely weakened immune system (immunocompromised) due to a health condition or medication, [consider the following](#):
  - People who are severely ill with COVID-19 might need to stay home longer than 10 days and up to 20 days after symptoms first appeared.
  - [People who are severely immunocompromised](#) may require testing to determine when they can be around others.
  - Talk to your healthcare provider for more information. If testing is available in your community, it may be recommended by your healthcare provider. Your healthcare provider will let you know if you can resume being around other people based on the results of your testing.
  - Your doctor may work with [an infectious disease expert or your local health department](#) to determine whether testing will be necessary before you can be around others.
- For Anyone Who Has Been Around a Person with COVID-19
  - Anyone who has had close contact with someone with COVID-19 should stay home for 14 days **after their last exposure** to that person.
  - However, anyone who has had close contact with someone with COVID-19 and who:
    - developed COVID-19 illness within the previous 3 months **and**
    - has recovered **and**
    - remains without COVID-19 symptoms (for example, cough, shortness of breath) **does not** need to

stay home.

## STRESS AND COPING

- The COVID-19 pandemic may be [stressful](#) for people. Fear and anxiety about a disease can be overwhelming and cause strong emotions in adults and children.
- People who may respond more strongly to the stress of a crisis include:
  - People who are at higher risk for severe illness including older adults and people of any age who have serious underlying medical conditions
  - Children and teens
  - People who are helping with the response to COVID-19, like doctors and other healthcare providers, or first responders
  - People who have mental health conditions including problems with substance use
  - People who are essential workers or living in shared housing who are at increased risk of infection and their family members
- Stress during an infectious disease outbreak may appear as
  - Fear and worry about your own health and the health of your loved ones
  - Changes in sleep or eating patterns
  - Difficulty sleeping or concentrating
  - Worsening of chronic health problems
  - Worsening of mental health conditions
  - Increased use of alcohol, tobacco, or other drugs
- Things you can do to support yourself and the people you care for:
  - Take breaks from watching, reading, or listening to news stories, including social media. Hearing about the pandemic repeatedly can be upsetting.
  - Take care of your body. Take deep breaths, stretch, or meditate. [Try to eat healthy, well-balanced meals, exercise regularly, get plenty of sleep](#), and [avoid alcohol](#) and drugs.
  - Make time to unwind. Try to do activities you enjoy.
  - Connect with others through calls (audio or video), instant messaging, email, letters, or other forms of communication, even if you cannot be together in person.
  - Talk with people you trust about your concerns and how you are feeling.
- If you, or someone you care about, is feeling overwhelmed with emotions like sadness, depression, or anxiety, or if you are concerned about harming yourself or others, call 911 or the SAMHSA Disaster Distress Helpline: 1-800-985-5990.
- If you, or someone you care about, is experiencing domestic violence or is affected by abuse and needs support, call 911 or the National Domestic Violence Hotline: 1-800-799-7233 (TTY 1-800- 787-3224).

## SUICIDE

- Different life experiences affect a person's risk for suicide.
  - Suicide risk is higher among people who have experienced violence, including child abuse, bullying, or sexual violence.
  - Feelings of isolation, depression, anxiety, and other emotional or financial stresses are known to raise the risk for suicide. People may be more likely to experience these feelings during a crisis like a pandemic.
- There are ways to protect against suicidal thoughts and behaviors.
  - Support from family and community, or feeling connected, can help with suicidal thoughts and behavior.



- Access to in-person or virtual counseling or therapy can help with suicidal thoughts and behavior, particularly during a crisis like the COVID-19 pandemic.
- If you, or someone you care about, is feeling overwhelmed with emotions like sadness, depression, or anxiety, or if you are concerned about harming yourself or others, get immediate help in a crisis:
  - Call 911
  - [Disaster Distress Helpline](#): 1-800-985-5990
  - [National Suicide Prevention Lifeline](#): 1-800-273-TALK (8255) for English, 1-888-628-9454 for Spanish, or [Lifeline Crisis Chat](#).
- Additional Suicide Prevention Resources:
  - [Suicide Risk Factors and Warning Signs](#)
  - [Five Action Steps for Communicating with Someone Who May Be Suicidal](#)

## MINIMIZING STIGMA AND MISINFORMATION

- [Minimizing stigma and misinformation](#) is important, especially during contagious disease outbreaks.
- Frontline healthcare workers, other essential workers, and members of some racial and ethnic groups and immigrants (such as people of Chinese ancestry or Asian ancestry in general, who are associated with the country or region of origin of the COVID-19 pandemic) are more likely to be the target of stigmatization and discrimination.
- Everyone: Know the facts about COVID-19 and help prevent the spread of rumors:
  - Fight stigma by supporting people who are coming back to school or work after completing their quarantine or isolation period for COVID-19 exposure or illness.
  - Someone who has completed their quarantine or met the requirements to discontinue infection control measures does not pose a risk of spreading COVID-19.
  - People of Asian descent, including Chinese Americans, are not more likely to get coronavirus than anyone else. Let people know that being of Asian descent does not increase the chance of getting or spreading COVID-19.
  - Viruses cannot target people from specific populations, ethnicities, or racial backgrounds.
- To [help counter stigma](#), public health professionals can:
  - Maintain privacy and confidentiality of those seeking healthcare and those who may be part of any contact investigation.
  - Communicate the risk or lack of risk from associations with products, people, and places in a timely manner.
  - Raise awareness of COVID-19 while showing empathy for people's concerns and fears.
  - Counter myths and rumors by sharing accurate information about how the virus spreads.
  - Speak out against negative behaviors, including negative statements on social media about groups of people, or exclusion of people who pose no risk from regular activities.
- Thank healthcare workers and responders. People who have traveled to areas where the COVID-19 outbreak is happening to help have performed a valuable service to everyone by helping make sure this disease does not spread further.
- Share with others the need for social support for people who have experienced stigma, who have returned from an area with ongoing spread, or who are worried about friends or relatives in the affected areas.

## ANIMALS AND COVID-19

- At this time, there is no evidence that animals play a significant role in spreading SARS-CoV-2, the virus that causes COVID-19 in people. Based on the limited information available to date, the risk of animals spreading COVID-19 to

people is considered to be low.

- We know that cats, dogs, and a few other types of animals can be infected with SARS-CoV-2, the virus that causes COVID-19, but we don't yet know all of the animals that can get infected.
- We are still learning about this virus, but it appears that it can spread from people to animals in some situations.
- A small number of pet cats and dogs have been reported to be infected with SARS-CoV-2 in several countries, including the United States. Most of these pets became sick after close contact with people with COVID-19.
- Several lions and tigers at a New York zoo tested positive for SARS-CoV-2 after showing signs of respiratory illness. Public health officials believe these large cats became sick after being exposed to a zoo employee who was infected with SARS-CoV-2. All of these large cats have fully recovered.
- SARS-CoV-2 has been reported in mink (which are closely related to ferrets) on multiple farms in the Netherlands, Denmark, Spain, and the United States.
  - SARS-CoV-2 infection in farmed mink has been characterized by respiratory disease and an increased mortality rate.
  - Because some workers on these farms had symptoms of COVID-19, it is likely that infected farm workers were the source of the mink infections.
  - Currently, there is no evidence that animals play a significant role in the spread of SARS-CoV-2 to people. However, reports from infected mink farms in the Netherlands suggest that in these environments there is the possibility for spread of SARS-CoV-2 from mink to humans.
- Additionally, some farm cats and dogs on mink farms in Europe also tested positive for SARS-CoV-2, suggesting they had been exposed to the virus.
- Additional animals may test positive as infections continue in people.
- CDC, USDA, and state public health and animal health officials are working in some states to conduct active surveillance of SARS-CoV-2 in pets.
  - These pets include cats, dogs, and other small mammals that had contact with a person with COVID-19.
  - These animals are being tested for SARS-CoV-2 infection and also are being tested to see whether the pet develops antibodies to this virus.
  - This surveillance will help experts better understand how common SARS-CoV-2 infection might be in pets as well as the possible role of pets in the spread of this virus.
- USDA maintains a list of all [animals with confirmed infections with SARS-CoV-2](#) in the United States.
- At this time, routine testing of animals is not recommended.
- Until more is learned about this virus, pet owners should treat pets like human family members to protect them from possible infection.
  - Do not let pets interact with people outside the household.
  - Keep cats indoors when possible.
  - Walk dogs on a leash at least 6 feet (2 meters) from others.
  - Avoid public places where a large number of people gather.
  - Do not put masks on pets. Covering a pet's face could harm them.
  - Do not wipe or bathe your pet with chemical disinfectants, alcohol, hydrogen peroxide, hand sanitizer, counter-cleaning wipes, or other industrial or surface cleaners. There is no evidence that the virus can spread to people from the skin, fur, or hair of pets. Talk to your veterinarian if you have questions about appropriate products for bathing or cleaning your pet.
- [Guidance for service and therapy animals](#) differs in some situations.
- CDC continues to recommend that people sick with COVID-19 isolate themselves from other people **and** animals, including pets, during their illness until more is known about how this virus affects animals.

- When possible, have another member of your household care for your pets while you are sick.
- Avoid contact with your pet, including petting, snuggling, being kissed or licked, sharing food, and sleeping in the same bed.
- If you must care for your pet or be around animals while sick, wear a mask and wash your hands before and after you interact with them.
- If you are sick with COVID-19 and your pet becomes sick, **do not** take your pet to the veterinary clinic yourself.
  - Call your veterinarian and tell them you are sick with COVID-19.
  - Some veterinarians may offer telemedicine consultations or other ways to see sick pets.
  - Your veterinarian can evaluate your pet and determine the appropriate steps for care.
- At this time, CDC has no data to suggest that this new coronavirus or other similar coronaviruses are spread by mosquitoes or ticks.
  - Mosquitoes and ticks cannot spread all types of viruses. For a virus to pass to a person through a mosquito or tick bite, the virus must be able to replicate inside the mosquito or tick.

## TRAVEL

### PRESIDENTIAL PROCLAMATIONS ANNOUNCING TRAVEL RESTRICTIONS FOR TRAVELERS FROM BRAZIL, IRAN, PARTS OF EUROPE, AND CHINA

- President Trump has signed five COVID-19 presidential proclamations suspending entry to the United States of foreign nationals who have, in the past 14 days, been in certain countries and regions particularly affected by the COVID-19 pandemic.
  - The proclamations were issued on [January 31](#), [February 29](#), [March 11](#), [March 14](#), and [May 24](#).
  - These proclamations suspend and limit entry into the United States, as immigrants or nonimmigrants, all aliens who were physically present within the specific countries during the 14-day period preceding their entry or attempted entry into the United States, with certain exceptions.
  - The countries and regions covered by the proclamations are
    - [Brazil](#) (May 24 proclamation)
    - [Republic of Ireland](#) (March 14 proclamation)
    - [United Kingdom](#): England, Scotland, Wales, and Northern Ireland (March 14 proclamation)
    - [Schengen Area of Europe](#): Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and Switzerland (March 11 proclamation)
    - [Iran](#) (February 29 proclamation)
    - [People's Republic of China](#), excluding Hong Kong and Macau (January 31 proclamation)
- Exemptions to these travel restrictions include, but are not limited to, American citizens, legal permanent residents, and certain family members of U.S. citizens and legal permanent residents. (Hereafter referred to as "American citizens and exempted persons.")
  - The text of the proclamations ([January 31](#), [February 29](#), [March 11](#), [March 14](#), and [May 24](#)) provides a full list of exemptions.

### DISCONTINUATION OF SCREENING AT PORTS OF ENTRY

- On September 14, 2020, the United States removed requirements for directing all flights carrying airline passengers arriving from, or who had recently had a presence in, certain countries to land at one of 15 designated

airports. Enhanced entry health screening for these passengers was also stopped on this day.

- The U.S. Government now have a better understanding of COVID-19 transmission and that transmission of the virus may occur from passengers who have no symptoms or who have not yet developed symptoms of infection. This indicates that symptom-based screening has limited effectiveness because people with COVID-19 may have no symptoms or fever at the time of screening, or only mild symptoms.
- By refocusing mitigation efforts on individual passenger risk throughout the air travel journey, the U.S. Government can most efficiently protect the health of the American public. Therefore, CDC is shifting its strategy and prioritizing other public health measures to reduce the risk of travel-related disease transmission, including
  - Pre-departure, in-flight, and post-arrival health education for passengers.
  - Responding to reports of illness on airplanes, ships, and at land-border crossings.
  - Voluntary collection of contact information from passengers using electronic means, as proposed by some airlines to avoid long lines, crowding, and delays associated with manual data collection.
  - Country-specific risk assessments to assist passengers in making informed decisions about travel-related risk.
  - Enhanced training and education of partners in the transportation sector and at U.S. ports of entry to ensure recognition of illness and immediate notification to CDC.
  - Post-arrival passenger recommendations for self-monitoring and precautions to protect others, including recommending people arriving from high-risk destinations stay home to the extent possible for 14 days.
  - [Potential testing to reduce the risk of travel-related transmission of the virus that causes COVID-19 and movement of the virus from one location to another.](#)
- While enhanced entry health screening was in effect at the airports designated for funneling purposes, fewer than 15 cases of COVID-19 were identified among the 675,000 people who underwent the enhanced screening. More cases were identified through airport partner notifications to CDC and standard illness response during that period.

## CDC TRAVEL HEALTH NOTICES AND OTHER TRAVEL GUIDANCE

- CDC has posted information for [Travel during the COVID-19 Pandemic](#)
- All travelers should take precautions including [social distancing](#), washing hands often, [wearing a face mask](#), and watching their health for [symptoms of COVID-19](#).
- CDC notifies travelers and other audiences about health threats in destinations around the world through [Travel Health Notices \(THN\)](#).
- On March 27, CDC posted a [Level 3 Global Pandemic Notice](#), advising travelers to avoid all nonessential international travel to foreign countries and US Territories around the world due to widespread, ongoing transmission of COVID-19. As the situation has changed in destinations around the world, on August 6, 2020, CDC replaced the global travel notice with destination-specific COVID-19 Travel Health Notices (THNs). CDC developed an evidence-based process for assessing COVID-19 risk in all destinations individually. This process is called de-escalation.
- COVID-19 THN de-escalation is based on two sets of criteria that contain information about:
  - Virus transmission within a destination (primary criteria).
  - Healthcare capacity and public health infrastructure at the destination (secondary criteria).
- Each day, CDC monitors each country's primary criteria using World Health Organization COVID-19 surveillance data.
- Primary criteria for de-escalation are met when new case counts and incidence rates (the number of new cases per 100,000 people in the population) remain below set thresholds and number of new cases is either stable or declining. For destinations with populations under 300,000, only new case count and new case trajectory are used for primary criteria.

- Once a destination meets the primary criteria for de-escalation, CDC looks at secondary criteria to assess if there is adequate healthcare capacity and public health infrastructure to meet COVID-19 needs.
- If cases in a destination increase after it has been de-escalated, CDC will move the country to a higher level based on the criteria.
- For more information and details about de-escalation criteria please see how [CDC determines the risk level for COVID-19 Travel Health Notices](#).
- Travelers can check the THN for their destinations on CDC's [COVID-19 Travel Recommendations by Destination](#) webpage.
- [CDC has posted Know When to Delay your Travel to Avoid Spreading COVID-19](#).
  - People who are sick, have recently tested positive for the virus that causes COVID-19, or have been exposed to a person with COVID-19 should delay travel. Travelers can check this page to see when and for how long to delay travel to avoid spreading COVID-19.
- [CDC has posted Know Your Travel Risk](#).
  - [Some travel activities, like staying at guest lodgings, can increase an individual's risk of getting COVID-19.](#)
  - [The chances of exposure are higher if a traveler comes in close contact with others, especially people they don't know, or use shared public facilities \(like restrooms or picnic areas\).](#)
  - [Travelers can check the Know Your Travel Risk page to see which travel activities are lower risk.](#)
- CDC updated its after travel guidance to encourage all travelers (both international and domestic) to be aware of the risk they pose to family, friends, and home community as a result of possible COVID-19 exposure during travel. For the latest after travel recommendations for travelers, see CDC's [After You Travel](#) webpage.
  - Some types of travel put travelers at higher risk for exposure to COVID-19. These travelers should take extra precautions to protect others for 14 days after they arrive, including staying home as much as possible, avoiding being around people at a higher risk for severe illness from COVID-19, and considering getting tested for COVID-19. Higher risk activities include being in an area that is experiencing high levels of spread (e.g. a destination with a Level 3 Travel Health Notice), attending a mass gathering, being in crowded places, and travel on a cruise ship or river boat.
- CDC has issued a [Level 3 Travel Health Notice](#) for cruise ship travel. CDC recommends that all people [defer travel on cruise ships](#), including river cruises, worldwide.
- On April 22, CDC posted a [road travel toolkit](#) for transportation partners.
- On May 2, CDC posted an [air travel toolkit](#) for airline partners.
- On August 21, CDC posted a [southern border toolkit](#) to help partners—including state and local health departments, governmental and non-governmental organizations, and community outreach groups—provide timely, effective, and culturally appropriate COVID-19 information to those who live, work, and travel along the U.S.-Mexico border.
- [All international travelers arriving at a U.S. airport or land border crossing receive a Travel Health Alert Notice with information about how to watch their health and protect others during the 14 days after their arrival.](#)
- [Health information is also posted on electronic message boards in arrival areas.](#)

## REPATRIATION FLIGHTS AND QUARANTINE ORDERS

- CDC has supported the Department of State in the safe and expedient ordered departure by chartered flights of U.S. citizens and residents from locations affected by outbreaks of COVID-19.
  - Individuals repatriated from Hubei Province, China, and from the Diamond Princess cruise ship docked in Yokohama, Japan, were issued quarantine orders on arrival in the United States.
- CDC also supported efforts to disembark and repatriate passengers aboard the Grand Princess, docked at the Port of Oakland.

- CDC managed approximately 3,200 federal [isolation and quarantine](#) orders for people from Hubei Province, China, the Diamond Princess cruise ship, and the Grand Princess cruise ship.
- All individuals under federal public health orders have completed quarantine or isolation and have returned home.

## CRUISE SHIPS AND RIVER CRUISES

- On July 20, CDC updated its [Interim Guidance for Ships on Managing Suspected Coronavirus Disease 2019](#).
  - This guidance was originally posted on February 18.
- On March 17, CDC recommended all persons [defer any travel on cruise ships](#), including river cruises, worldwide because of the increased risk of COVID-19 on board ships.
- CDC is continuously tracking the status of cruise ships operating in U.S. waters or coming into U.S. ports.

## NO SAIL ORDER

- On July 16, CDC extended the [No Sail Order \(NSO\) and Suspension of Further Embarkation; Notice of Modification and Extension and Other Measures Related to Operations](#) to suspend cruise ship operations in U.S. waters.
- This Order will remain in effect until the earliest of
  - The expiration of the Secretary of Health and Human Services' declaration that COVID-19 constitutes a public health emergency;
  - The CDC Director rescinds or modifies the order based on specific public health or other considerations;
  - September 30, 2020.
- Cruise ship operators must continue to suspend passenger operations for ships operating in U.S. waters and may not embark passengers at U.S. ports.
- Cruise ship operators of ships in U.S. waters must continue to follow CDC's [Interim Guidance for the Period of the No Sail Order](#).
  - CDC works closely with the U.S. Coast Guard and the U.S. Customs and Border Protection, as well as state and local public health officials, port authorities, and law enforcement, to ensure cruise lines are adhering to the conditions of the NSO and that crew members can safely disembark in a manner that protects public health.
  - The NSO requires, as a condition to continue to operate in U.S. waters, that cruise ship operators submit to CDC a COVID-19 response plan that adequately prevents, mitigates, and responds to the spread of COVID-19 among crew on board cruise ships.
- CDC will assess each ship's status based on whether the ship has any confirmed COVID-19 cases or COVID-19-like illness onboard over a 28-day period. CDC also reviews available information about crew transfers and embarkations.
- Ships of cruise lines with complete and accurate response plans and a signed acknowledgement are permitted to use commercial travel to disembark crew members, if the ship in question has achieved [Green status](#) and if the cruise line has signed CDC's attestation for commercial travel stating that it is meeting CDC's requirements under the Interim Guidance.
  - Green status means that the cruise ship has not had confirmed cases of COVID-19 or COVID-like illnesses on board the ship within the last 28 days and has had no unauthorized embarkations or crew transfers.
    - A confirmed case is defined as laboratory-confirmed case of COVID-19 by PCR testing
    - COVID-like illness is defined as acute respiratory illness, influenza-like illness, or pneumonia
  - CDC will review weekly surveillance data submitted by ships using the Enhanced Data Collection (EDC) During COVID-19 Pandemic Form.
  - For a ship to maintain Green status, it must have no new cases of COVID-19 or COVID-like illnesses onboard. Green status is required to maintain commercial travel eligibility status.

- Meeting these criteria does not mean cruise ships can embark passengers or resume passenger operations. At this time, there is not enough information to say when it will be safe to resume sailing with passengers.
  - For ships that have not achieved Green status, CDC will permit crew to disembark from cruise ships in a way that does not endanger the public's health and to travel by non-commercial means such as by charter flight.
  - To allow crew to disembark, the cruise ship operator must sign an attestation and agree to follow specific conditions designed to protect the public's health.
- On June 15, CDC posted [Crew Disembarkations through Commercial Travel](#), which explains the criteria ships need to meet to use commercial travel to disembark crew members. This resource also includes a list of the cruise lines that have ships operating or planning to operate in U.S. waters during the period of the No Sail Order extension.
  - CDC provides additional information about [Cruise Ship Crew Member Disembarkations](#) on its website.
    - CDC wants to make sure the crew members are aware that there is a process in place for them to safely disembark and return home.
    - CDC stands ready to approve requests from cruise lines within 72 hours of receipt. Most requests are processed on the same day.
    - CDC encourages crew members who want to disembark to contact their cruise line about their requests to disembark.
  - Emergency medical evacuations may be coordinated with U.S. Coast Guard and do not require CDC approval. CDC has notified all cruise lines as well as federal, state, and local partners that the NSO will not prevent anyone from receiving emergency medical care.
- On July 21, CDC posted the [Request for Information Related to Cruise Ship Planning and Infrastructure, Resumption of Passenger Operations, and Summary Questions](#).
  - [The RFI closed on Sept. 21, 2020 with more than 12,000 comments.](#)
  - CDC [invited](#) public comment on specific questions regarding interventions, methods, protocols, and procedures for protecting the public's health as well as the health of prospective passengers, crew members, and industry-related service providers.
  - This information may be used to inform future public health guidance and preventative measures relating to travel on cruise ships.
  - On August 5, the [Cruise Line Industry Association \(CLIA\) and Its Ocean-Going Cruise Line Members Announced Their Third Voluntary Suspension of U.S. Operations](#). According to CLIA's website, their ocean-going cruise line members have agreed to voluntarily suspend U.S. cruise operations until at least October 31, 2020.

## WHAT CDC IS DOING

- Millions of people are depending on CDC to keep them safe from the threat of COVID-19.
- [CDC is responding to this pandemic](#) by preparing healthcare workers, learning more about how the disease spreads, and supporting state, local, tribal and territorial health departments in controlling the outbreak.
- CDC established a COVID-19 Incident Management Structure on January 7. On January 21, CDC activated its Emergency Operations Center to better provide ongoing support to the COVID-19 response.
- CDC is supporting first responders, healthcare providers, and health systems by
  - Complementing local efforts to increase capacity by deploying CDC teams and partnering with other federal agencies to give states more staffing options.
  - Developing guidance for and conducting outreach to clinical and hospital professional organizations to ensure health systems are prepared to [treat patients](#).

- Working with supply chain partners to ensure that healthcare workers have access to PPE by understanding supply usage.
- Working with partners on outreach activities and educational efforts to increase provider awareness of Multisystem Inflammatory Syndrome in Children (MIS-C).
- Staffing CDC's [Clinician On-Call Center](#), which supports healthcare personnel working to prevent, detect, and respond to COVID-19.
  - The 24-hour hotline is staffed by CDC clinicians standing by to answer healthcare personnel questions about COVID-19.
- CDC is advising businesses, communities, and schools by
  - Providing resources that [health departments](#), [businesses](#), [schools](#), and [other institutions](#) can use as they make decisions about community mitigation measures, including protecting vulnerable populations.
  - Publishing a list of strategies that [people planning events and gatherings](#) can use to help lower the risk of COVID-19 exposure and spread.
- CDC is keeping travelers and destination communities healthy by
  - Issuing [Travel Health Notices \(THNs\)](#) about current health issues around the world, including disease outbreaks.
  - Providing guidance for [travel during the COVID-19 pandemic](#).
  - Issuing an unprecedented [Travel Health Notice for cruise ship travel](#) which recommends that all people [defer travel on cruise ships](#) worldwide, and issuing a [No Sail Order and Suspension of Further Embarkation](#) for cruise ships operating in U.S. waters.
  - Providing international travelers arriving at a U.S. airport or land border crossing information about how to watch their health and protect others during the 14 days after arrival.
  - Partnering with refugee resettlement agencies to provide refugees with critical information in their native languages to help them and their families stay healthy during the COVID-19 pandemic after arriving in the United States.
  - Working closely with community organizations and public health professionals to educate and meet the healthcare needs of essential workers traveling to the United States on temporary agricultural work visas.
- CDC is spreading the word about COVID-19 by
  - Sharing a variety of [communications resources](#), in both English and Spanish, that state and local governments and community organizations can use to support their own response to the pandemic.
    - Select resources are available in additional languages.
  - Developing a [social media toolkit](#) of graphics and suggested messages to help communities spread their messages about COVID-19. All content on this page is in the public domain and free for anyone to use.
  - **Providing funding in the amount of \$1 million to organizations serving farmworkers to establish a network of community-based organizations (CBOs), enhance the emergency prevention and response capacity of these CBOs, and provide resources needed to outreach farmworkers with COVID-19 information.**
- CDC has shared and continues to share the latest scientific knowledge by
  - Developing an rRT-PCR test [to diagnose current COVID-19 infection](#) that helps to equip state and local public health laboratories with the capacity to test people for [SARS-CoV-2](#).
  - Developing an rRT-PCR test that will detect two types of seasonal flu viruses and [SARS-CoV-2](#) at the same time. This test will be used by U.S. public health laboratories.
  - Uploading the entire genome sequence of the viruses from reported cases in the United States to GenBank.



- [Growing SARS-CoV-2](#) in cell culture, a necessary step for further studies, and sending it to the [National Institute of Health's BEI Resources Repository](#) for use by the broader scientific community.
- Publishing the results of COVID-19 outbreak investigations in CDC's [Morbidity and Mortality Weekly Report](#).
- CDC is conducting surveillance, research, and analyzing data by
  - Studying various characteristics of the virus that causes COVID-19 to better understand factors that may contribute to spread of the disease, which can help determine ways to slow spread.
  - Developing and publishing [COVIDView](#), a weekly summary and analysis of testing, hospitalizations, and mortality for COVID-19-like illness (CLI) and influenza-like illness (ILI) nationwide.
  - Managing and analyzing data from U.S. public health laboratories, influenza-like illness surveillance (ILI), and the hospitalization surveillance system [COVID-Net](#).
  - Tracking reports of MIS-C associated with COVID-19 in the United States and Europe and collaborating with domestic and international partners to understand this new syndrome, including how common it is and its risk factors, and to begin tracking cases.
  - Conducting surveillance research and studies among pregnant people and infants exposed to the virus that causes COVID-19 during pregnancy to better understand how it affects them.
  - Developing [COVIDTracer](#), a spreadsheet-based tool that helps public health officials and policy makers compare three different contact tracing and monitoring strategies.
    - COVIDTracer describes CDC's role in and core principles of contact tracing.
- CDC is supporting state, tribal, local, and territorial health departments by
  - Working with them to detect and investigate cases, and implement mitigation measures, as needed in their communities.
    - [Primary Indicators to Systematically Monitor COVID-19 Mitigation and Response — Kentucky](#)
    - [Characteristics and Outcomes of Contacts of COVID-19 Patients Monitored Using an Automated Symptom Monitoring Tool — Maine](#)
    - [Public Health Efforts to Mitigate COVID-19 Transmission During the April 7, 2020, Election — City of Milwaukee, Wisconsin](#)
  - Working with them to address the needs of groups disproportionately affected by COVID-19 including racial and ethnic minority groups, tribal groups, and groups experiencing social and economic disparities.
  - Developing resources and tools to monitor and evaluate implemented mitigation measures
    - [An Approach for Monitoring and Evaluating Community Mitigation Strategies for COVID-19](#)
    - [Monitoring and Evaluation Action Guide: Wearing Masks as a COVID-19 Community Mitigation Strategy](#)
  - Deploying multidisciplinary teams to support clinical management, contact tracing, community mitigation, infection prevention and control, surveillance, data management, and communications.
  - Working with jurisdictions to identify needs for surge staff to conduct contact tracing, provide infection prevention and control expert guidance, educate communities about COVID-19, support epidemiologic investigations and data analysis efforts, and more.
    - Staff hired through various mechanisms will be placed directly in health departments to provide surge support.
  - Providing funding to help health departments respond to current COVID-19 outbreaks and prepare for future outbreaks.
    - Through the Public Health Emergency Preparedness (PHEP) cooperative agreement, 62 PHEP programs across the country are part of the multi-agency infrastructure working on quarantine, isolation, case finding, protecting healthcare workers, and ensuring medical supply chains.

- Early in the response, CDC provided funding in the amount of \$35 million to 21 jurisdictions for immediate COVID-19 response activities.
- On March 16, 10 days after the appropriations act was signed, CDC awarded nearly \$570 million in funding to 65 state, tribal, local, and territorial jurisdictions to prevent, prepare for, and respond to the COVID-19 outbreak.
  - CDC authorized recipients to begin spending their funds immediately.
  - The funding supports two required activities
    - Accelerated laboratory testing, data collection, and real-time reporting to CDC for identification and tracking of COVID-19 cases in the community; and
    - Implementation of COVID-19 community intervention plans.
- Providing more than \$200 million in COVID-19 funding to Indian Country to support tribes and tribal organizations in carrying out COVID-19 preparedness and response activities, including surveillance, epidemiology, laboratory capacity, infection control, and mitigation.

## CDC'S CORONAVIRUS SELF-CHECKER

- CDC's Coronavirus Self-Checker (also called Clara), is [an online tool](#) that asks basic questions about underlying medical conditions, current symptoms, and COVID-19 exposure. Based on your individual answers, Clara provides recommendations about whether and when to pursue medical care.
- This tool can be used by anyone concerned about having or being exposed to COVID-19 to help them assess if and when to see a medical provider.
- Clara can be used for children and youth ages 2-17, in addition to adults 18 and over.
  - For younger children, ages 2 to 9, parents and caregivers can complete the symptom checker on behalf of the child.
  - For children ages 10 to 12, CDC recommends parents and caregivers complete the symptom checker with the child.
  - Teenagers, ages 13 to 17, can complete the symptom checker on their own, or with a parent or caregiver.
- CDC anticipates Clara will assist children and their parents and caregivers with questions about their COVID-19 symptoms and level of risk. Clara encourages direct communication with a child's healthcare provider when needed.
  - Clara asks questions about symptoms that may be warning signs for [Multisystem Inflammatory Syndrome in Children \(MIS-C\)](#), so that children with these symptoms can be referred to medical care as soon as possible.
  - Clara is "open source" in Open CDC and is available as an App through Apple and Google.
    - The Open Source project is available at <https://github.com/CDCgov/covid19healthbot> under Apache Public License v2.
    - For additional information, please visit <https://www.philab.cdc.gov/index.php/2012/03/27/open-source-development-for-public-health-informatics/>.

## CONTACT TRACING

- Contact tracing is an important strategy to prevent the further spread of COVID-19.
- For decades, public health departments have used contact tracing to slow or stop the spread of other infectious diseases, like syphilis and HIV.

- Contact tracing involves following up with people who have COVID-19 (also known as case investigation) and people who have been in close contact with someone who has COVID-19 (also known as contact tracing).
- Public health workers, or contact tracers, take these critical steps
  - **Case investigation:** working with a person who has COVID-19 to help them recall everyone they had close contact with during the time when they may have been infectious.
  - **Contact tracing:** notifying people who were potentially exposed to a person who has COVID-19, as rapidly and sensitively as possible.
    - People who were potentially exposed are referred to as contacts during this process.
    - The identity of the person with COVID-19 is not revealed to contacts during this process.
  - **Contact support:** Providing education, information, and support to help contacts understand their risk, what they should do to separate themselves from others who are not exposed, and how to monitor themselves for symptoms. It is critical that contacts understand that they can spread the infection even if they don't feel sick.
  - **Self-quarantine:** Encouraging contacts to stay home and stay at least 6 feet away from others until 14 days after their last exposure to a person with COVID-19.
  - **Isolation:** Urging contacts who have the virus or who are showing symptoms of COVID-19 to separate themselves from others.
- The success of contact tracing depends in large part on a community's acceptance and participation.
- Health departments should communicate with the people and communities they serve to help them understand and accept contact tracing as an important way to slow the spread of COVID-19 and to protect their family, friends, and communities.
  - To help with these communications, CDC has developed a [webpage](#) and [frequently asked questions](#) about what contract tracing is, why it is important, and what people who get COVID-19, or who are exposed to someone who has it, can expect from the process.

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## CDC CONTACT TRACING SUPPORT AND RESOURCES

- CDC's primary role in case investigation and contact tracing is to provide guidance and support to help state, tribal, local, and territorial health departments launch effective contact tracing programs by
  - Providing COVID-19 assistance directly to states, tribes, localities, and territories through the more than 300 CDC field assignees embedded in health departments across the nation.
  - Linking health departments with other federal agencies, academia, and organizations that offer contact tracing and case management staffing solutions.
  - Providing guidance, technical assistance, and resources to help health departments rapidly hire and train staff.
  - Funding the CDC Foundation to hire local staff to augment health department response efforts, including contact tracing.
- CDC's [Interim Guidance on Developing a COVID-19 Case Investigation and Contact Tracing Plan](#) provides staffing recommendations, key considerations, and strategies to help health departments facilitate case investigation and contact tracing.
- CDC has developed COVID-19 contact tracing guidance documents that are available on the [CDC Contact Tracing page](#) and [CDC contact tracing training page](#).
  - CDC also provides information about [Digital Contact Tracing Tools](#) and [Guidelines for the Implementation and Use of Digital Tools to Augment Traditional Contact Tracing](#).
  - The [Interim COVID-19 Contact Tracing Communications Toolkit](#) can help health departments share information about contact tracing with the people they serve. The toolkit is also [available in Spanish](#).

- [Training modules](#) for state and local public health departments can help them design and customize their own training plans for COVID-19 contact tracers, case investigators, and team leads.
- [COVIDTracer](#) is a spreadsheet-based tool that allows public health officials and policy makers to compare three different contact tracing and monitoring strategies.
  - Users can vary estimates of the potential effectiveness of each strategy, the average number of contacts per case, and the time needed for case interviews and contact follow-up activities.

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## CDC CASE INVESTIGATION AND CONTACT TRACING IN NONHEALTHCARE WORKPLACES

- COVID-19 is a [nationally notifiable disease](#), and when diagnosed or identified, must be reported by healthcare providers and laboratories to state, tribal, local, and territorial (STLT) health departments. Health departments are responsible for leading case investigations, contact tracing, and outbreak investigations.
  - Case investigation is the identification and investigation of individuals with confirmed and probable diagnoses of a reportable communicable disease, such as COVID-19.
  - Contact tracing follows case investigation and is a process to identify, monitor, and support individuals who may have been exposed to a communicable disease, such as COVID-19.
- If the health department learns that a person is a [confirmed or probable case of COVID-19](#) and was in a workplace where close contact with others (employees, customers, or community members) may have occurred, the health department may contact the employer, employees, or customers to let them know of a potential exposure. Communication needs to be conducted in a culturally appropriate manner and in the preferred language of the affected individuals and communities.
- The involvement of the employer in the official health department contact tracing process will vary. It will depend on factors such as the size and type of workplace; the number of cases impacting the workplace; the health department’s capacity; and local, state, and federal laws and regulations. In general, when a COVID-19 case is identified that involves an employee, the health department’s approach regarding the employer may include one of the following:
  - Ask the employer for help in understanding the risk for transmission in the workplace by identifying exposures and contacts in the workplace;
  - Rely on the employer to identify workplace contacts; or
  - Conduct workplace contact tracing without directly engaging with the employer.
- If contacted by a health department, CDC encourages employers and employees to work closely with the health department’s case investigation and contact tracing efforts.
- When preparing to collaborate with the health department, employers may consider carrying out the following actions to aid the health department with case investigation and contact tracing in the workplace setting:
  - Establish a “COVID-19 coordinator” or team;
  - Create and implement a preparedness, response, and control plan;
  - Collect information in advance about the workplace operations, staffing, and infection control programs and practices;
  - Support employees and conduct workplace hazard evaluation and prevention activities; and
  - Communicate with employees about—and encourage them to collaborate with—the health department when case investigation and contact tracing processes are carried out.

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## DIGITAL TOOLS

- For COVID-19, the case interview continues to be the foundation for contact tracing activities and is typically done by telephone.
- There are two key types of digital technology that can contribute to the contact tracing process: case management tools and proximity tracing and or exposure notification tools.
  - Case management tools capture data on cases and contacts. Some allow for automated notification and

- follow-up.
- Proximity tracing or exposure notification tools use Bluetooth or GPS to track an individual’s exposure to cases.
- Proximity tracing or exposure notification tools are used in addition to case management tools.
- Adoption and evaluation of digital tools may make the traditional contact tracing process faster and more efficient.
- Digital -based technologies require users to voluntarily consent and opt-in.

## SEROLOGY SURVEILLANCE STRATEGY

- Tracking COVID-19 infections to determine how much of the U.S. population is infected over time is a CDC priority.
- CDC uses a variety of surveillance systems to track COVID-19 cases based on people who seek medical care.
- These systems miss infections that occur in people who did not seek medical care or get tested, many of whom had mild illness or no symptoms of illness.
- CDC is implementing a [serology surveillance strategy](#) to learn about the total number of people that have been infected, including those infections that might have been missed.
- The strategy involves working with state, local, territorial, academic, and commercial partners to better understand COVID-19 in the United States using [serology \(antibody\) testing](#) for surveillance (“seroprevalence surveys” or “serosurveys”).
- Seroprevalence surveys provide data to better understand how many SARS-COV-2 infections have occurred at different points in time, in different locations, and within different populations in the United States.
- U.S. serologic surveillance can provide a more complete estimate of how many people have been infected and assist in planning for outbreak response and control.
- Through seroprevalence surveys, CDC can—
  - track how infections progress through the population over time;
  - estimate how much of the population has not yet been infected;
  - look at [risk factors](#) for disease, such as a person’s age, location, or underlying health conditions;
  - determine how long antibodies last in people’s bodies following infection; and
  - help public health officials plan for future healthcare needs.
- Specifically, seroprevalence surveys help to answer important questions such as—
  - How is the amount of the U.S. population that has been infected changing over time?
  - Are there different characteristics, or risk factors, that are associated with infection of the virus that causes COVID-19, such as age, location, or underlying health conditions?
  - How many U.S. residents experienced mild or asymptomatic COVID-19 illness?
  - How long can antibodies be found after infection with the virus that causes COVID-19?
- At this time, seroprevalence surveys cannot answer questions such as—
  - How much of the U.S. population is immune to infection of the virus that causes COVID-19 and not able to get infected again?
  - How many antibodies are needed to protect someone from COVID-19?
  - How long will someone with antibodies be protected from COVID-19?
  - Can you be re-infected with the virus that causes COVID-19?
  - Can people with antibodies return to work?
- [The seroprevalence surveys CDC is conducting](#) include—
  - Community-level Seroprevalence Surveys that cover smaller areas, sampling from select counties and

systematically selecting participants from within the area to allow for a more representative population to be tested.

- Special Populations Seroprevalence Surveys that answer important questions about the risk of infection within specific populations such as healthcare workers or pregnant people.
- Large-scale Geographic Seroprevalence Surveys conducted in locations across the United States focusing on areas highly affected by COVID-19, such as Washington State and New York State, including New York City.

## COLLABORATION FOR ANTIBODY TESTING STUDY IN 25 U.S. CITIES

- In the largest nationwide seroprevalence survey to date, CDC is partnering with the National Institutes of Health's (NIH) National Institute of Allergy and Infectious Diseases (NIAID) and National Heart, Lung and Blood Institute (NHLBI), the Food and Drug Administration (FDA), Vitalant Research Institute (VRI), and large blood collection organizations to assess how many people in the United States may have been infected with the virus that causes COVID-19.
- As part of this collaboration, CDC will provide technical assistance and \$4.5 million in financial support to VRI and collaborating institutions for a seroprevalence survey in 25 U.S. metropolitan areas.
- In all, nearly 325,000 samples will be tested over the next 18 months by testing 1,000 blood samples apiece from the same 25 areas every month for 12 months with a final collection at 18 months.
- Testing will allow CDC to take "snap shots" of the percentage of people who have antibodies against the virus that causes COVID-19 at different time points to assess differences in infection rates around the country and over time.
- The results will help public health officials better understand how widespread the virus is.
- CDC and partners will ensure that results are accessible to government partners, researchers, and the public for use in public health decision making.

## CDC INTERNATIONAL RESPONSE

- The COVID-19 pandemic is a serious global health threat and CDC is committed to stopping the global spread. One country cannot do it alone. CDC has a long history of improving public health capacity throughout the world to contain outbreaks at their source and minimize their impact.
- CDC has staff stationed in more than 50 countries. CDC is providing assistance with planning and response efforts.
- Due to global travel restrictions, CDC has mobilized staff to support the global response to the COVID-19 pandemic from Atlanta headquarters. Many of these staffers have extensive experience responding to global outbreaks and pandemics.
  - CDC's global COVID-19 response, in collaboration with other U.S. government agencies, supports countries and international partners to prevent, detect, and respond to the COVID-19 pandemic.
  - CDC also supports countries and international partners in mitigating the spread and impact of COVID-19 worldwide, learning lessons from other countries and international partners, and preventing future global spread of COVID-19 through capacity building at local and country levels.
  - CDC staff supporting the agency's global response work in epidemiology, mitigation, infection prevention and control, laboratory, emergency preparedness and response, management and operations, and policy, partnerships, and communication.
- CDC experts in Atlanta and the field are working with WHO, international partners, and other U.S. agencies to support Ministries of Health and U.S. missions to prepare and respond to the global COVID-19 pandemic.
- CDC supports countries in:
  - Carrying out WHO recommendations related to the diagnosis and care of COVID-19 patients and tracking the epidemic;

- Conducting collaborative investigations that will help inform response efforts;
- Providing technical assistance on emergency operations, laboratory operations, infection prevention and control, border health strategies, risk communication and community engagement, and disease surveillance;
- Conducting training on preparedness and response;
- Serving as an important technical partner developing and strengthening [Field Epidemiology Training Programs \(FETP\)](#), which educate field epidemiologists—disease detectives—to identify and contain outbreaks; and
- Developing well-functioning national public health institutes with strong linkages among the public health functions critical for more efficient outbreak preparedness and response efforts.
- Since 2015, CDC has been a key implementing partner of the USG Global Health Security Agenda (GHSA).
  - GHSA investments have helped countries build national capacities to prevent, detect, and respond to infectious disease threats.
  - These investments and partnerships have laid foundations to rapidly and effectively prepare for emerging threats, including the current COVID-19 pandemic.
  - Lessons learned from addressing HIV, influenza, Ebola, dengue, Zika, and many other viruses are being applied to the COVID-19 response.
- As of June 11, CDC has committed an initial \$185 million for its COVID-19 activities in 33 countries. This is part of the \$300 million that was authorized for CDC’s global response to COVID-19 as appropriated by Congress in the Coronavirus Preparedness and Response Supplemental Appropriations Act.
  - This funding builds on CDC’s long-standing global investments to control HIV, TB, and malaria; eradicate polio; and prepare for influenza and other pandemic diseases. CDC investments to improve global health security have laid the foundation to rapidly and effectively prepare for emerging threats, including the current coronavirus pandemic.
  - CDC’s funding for international COVID-19 preparedness and response is supporting activities in 6 priority technical areas across the globe:
    - Emergency response
    - Laboratory, surveillance, and epidemiology
    - Border health and community mitigation
    - Infection prevention, control, and preparedness in healthcare facilities
    - Pandemic preparedness planning
    - Vaccine preparedness.
  - These cross-cutting technical efforts are essential for ending the COVID-19 pandemic globally.

## RECOMMENDATIONS

### HEALTHCARE PROFESSIONALS

- Clinicians can access laboratory tests for diagnosing COVID-19 through clinical laboratories performing tests authorized by FDA under an Emergency Use Authorization (EUA).
  - Clinicians can also access laboratory testing through public health laboratories in their jurisdictions.
  - The CDC [clinical criteria for considering testing](#) for COVID-19 have been developed based on what is known about COVID-19 and are subject to change as additional information becomes available. There are two categories for prioritizing testing:
    - High Priority

- Hospitalized patients with symptoms
- Healthcare facility workers, workers in congregate living settings with symptoms, and first responders with symptoms
- Residents in long-term care facilities or other congregate living settings, including correctional or detention facilities, or shelters
- Priority
  - Persons with symptoms of potential COVID-19 infection, including fever, cough, shortness of breath, chills, muscle pain, new loss of taste or smell, vomiting or diarrhea, and/or sore throat
  - Persons without symptoms who are prioritized by health departments or clinicians, for any reason, including but not limited to public health monitoring, sentinel surveillance, or screening of other asymptomatic individuals according to state and local plans

## RECOMMENDATIONS FOR REPORTING, TESTING, AND SPECIMEN COLLECTION

- Testing for other respiratory pathogens should not delay specimen testing for SARS-CoV-2.
- For initial diagnostic testing for SARS-CoV-2, CDC recommends collecting and testing an upper respiratory specimen. The following are acceptable specimens:
  - A nasopharyngeal (NP) specimen collected by a healthcare professional; or
  - An oropharyngeal (OP) specimen collected by a healthcare professional; or
  - A nasal mid-turbinate swab collected by a healthcare professional or by supervised onsite self-collection (using a flocked tapered swab); or
  - An anterior nares (nasal swab) specimen collected by a healthcare provider or by home or supervised onsite self-collection using a flocked or spun polyester swab.
  - NP wash/aspirate or nasal wash/aspirate (NW) specimen collected by a healthcare professional.
- For patients who develop a productive cough, sputum should be collected and tested for SARS-CoV-2. The induction of sputum is not recommended.
- For patients for whom it is clinically indicated (e.g., those receiving invasive mechanical ventilation), a lower respiratory tract aspirate or bronchoalveolar lavage sample may be collected and tested as a lower respiratory tract specimen.
- Once a person under investigation (PUI) is identified, specimens should be collected as soon as possible, regardless of the time of symptom onset. See [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for COVID-19](#) and [Laboratory FAQs](#) for handling and processing specimens from suspected cases and PUIs.
  - Collection of demographic and risk factors information in laboratory and case report forms is critical to identify populations of higher COVID-19 risk and those experiencing disparities in disease burden.
- Clinical specimens should be collected for routine testing of respiratory pathogens at either clinical or public health labs.
  - Clinical laboratories should NOT attempt viral isolation from specimens collected. Viral isolation from specimens should only be performed in a biosafety level 3 (BSL-3) laboratory.
- Maintain proper infection control when collecting specimens.
- [Additional guidance](#) for collection, handling, and testing of clinical specimens is available on CDC's website.
- Detailed information on specimen types and shipping is available in [CDC's guidelines for specimen collection, handling, and testing](#).



## COMMUNITY BASED INTERVENTIONS

- Protect yourself and your community from getting and spreading respiratory illnesses like coronavirus disease 2019. Everyone has a role to play in getting ready and staying healthy.
- Currently a vaccine is not available for COVID-19. Until a vaccine is developed, community-based interventions, such as temporary school dismissals, postponing or cancelling large events, social distancing (i.e., limiting face-to-face contact) can help slow the spread of coronavirus.
- Your state and local public health department and community partners have been preparing for disease outbreaks, like COVID-19 and have plans in place. Now is a good time for businesses, community and faith-based organizations, and health-care systems to reexamine their preparedness plans to make sure they are ready.
- Strong community partnerships between state and local public health departments, the healthcare sector, faith-based organizations, and other community partners are vital for this response, and will be necessary to prepare for and coordinate if an outbreak occurs in their local communities.
- Community-based interventions can be grouped in three categories:
  - Personal protective measures (e.g., voluntary home isolation of ill persons, voluntary home quarantine of exposed household members, respiratory and cough etiquette, using masks in community settings, practicing hand hygiene)
  - Community measures aimed at increasing social distancing (e.g., temporary school dismissals, social distancing in workplaces (like working remotely), postponing or cancelling mass gatherings)
  - Environmental measures (e.g., routine cleaning of frequently touched objects or surfaces)

## PROMOTING FAIR ACCESS TO HEALTH FOR EVERYONE

### RACIAL AND ETHNIC HEALTH INEQUITIES

- Long-standing systemic health and social inequities have put many racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19.
- [Social determinants of health](#) are conditions in the places where people live, learn, work, play that affect a wide range of health and quality-of-life risks and outcomes. Social determinants of health have historically prevented racial and ethnic minority groups from having fair opportunities for economic, physical, and emotional health.
- Some factors that put racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19 include
  - Discrimination, including racism
  - Lack of access to quality health care and health insurance
  - Language and cultural barriers between patients and providers
  - More chances to be exposed to the virus that causes COVID-19 because of
    - Working conditions such as close contact with the public or other workers, not being able to work from home, and not having paid sick days
    - Crowded living conditions for cultural or economic reasons
  - Less access to high-quality education
  - Lower income, less money saved up for emergencies, and limited job options

### HEALTH EQUITY

- Health equity is when everyone has the opportunity to be as healthy as possible.
- Achieving health equity requires valuing everyone equally with focused and ongoing efforts to address preventable inequities, historical and contemporary injustices, and the elimination of health and healthcare disparities.

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## WHAT EVERYONE CAN DO ABOUT HEALTH INEQUITIES

- To stop the spread of COVID-19 and move toward greater health equity, we must work together to ensure resources are available to maintain and manage physical and mental health. This includes easy access to information, affordable testing, and medical and mental healthcare.
- Community- and faith-based organizations, employers, healthcare systems and providers, public health agencies, policy makers, and others can
  - Read [CDC's COVID-19 Response Health Equity Strategy](#),
  - Learn more about [why racial and ethnic minority groups are at increased risk](#),
  - Determine which steps they can take to [promote fair access to health](#) for everyone,
  - Share CDC's COVID-19 health equity [resources and news](#) about CDC's efforts with partners.

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## CDC'S COVID-19 HEALTH EQUITY STRATEGY

- On Friday, July 24, CDC released its [COVID-19 Health Equity Strategy](#). This strategy represents CDC's commitment to:
  - Reduce health disparities using data-driven approaches
  - Engage community institutions and diverse leaders in efforts to reduce health disparities
  - Conduct outreach that is culturally and linguistically responsive and tailored to address the unique circumstances of groups at increased risk of getting sick and dying from COVID-19
  - Reduce stigma, including stigma associated with race and ethnicity
    - Stigma is discrimination against an identifiable group of people, a place, or a nation.
    - In the COVID-19 pandemic, stigma is associated with a lack of knowledge about how COVID-19 spreads, a need to blame someone, fears about disease and death, and gossip that spreads rumors and myths.
- The strategy aims to accelerate progress towards reducing COVID-19 disparities and achieving health equity by:
  - Expanding our collective knowledge as to how the nation can most effectively develop strategies to improve health and health outcomes for people that are disproportionately affected by COVID-19.
  - Expanding programs and practices for testing, contact tracing, isolation, healthcare, and recovery from the impact of unintended negative consequences of mitigation strategies in order to reach populations that have been put at increased risk.
  - Expanding program and practice activities to support essential and frontline workers to prevent transmission of COVID-19.
  - Continuing to build an inclusive public health workforce equipped to assess and address the unique needs of an increasingly diverse U.S. population.

## PERSONAL PROTECTIVE MEASURES

- Everyone can do their part to help prepare for, prevent, and respond to this emerging public health threat.
- CDC recommends that individuals and households create an emergency plan of action, practice good personal health habits and plan for home-based care (if needed).
- During an outbreak in your community, limit face-to-face contact with others.

## COMMUNITY MEASURES

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## MASS GATHERINGS

- CDC and other public health authorities have reported a number of COVID-19 outbreaks that began at large gatherings.
  - Gatherings are planned or spontaneous events like concerts, festivals, conferences, parades, weddings, or sporting events.
  - Gatherings can happen indoors or outdoors.
  - Gatherings may bring together only a small number of people or they may draw a large number of attendees.
- The *more people* you interact with at a gathering and the longer that interaction lasts, the higher the potential risk of you becoming infected with COVID-19 and of COVID-19 spreading among attendees.
- The [higher the level of community spread](#) in the area where the gathering is being held, the higher the risk of COVID-19 spreading during a gathering.
- The size of an event or gathering should be determined based on state, local, territorial or tribal safety laws and regulations.
- Event planners should consider implementing multiple, complementary strategies to
  - [Encourage behaviors that reduce the spread of COVID-19](#) among staff and attendees.
  - [Maintain healthy environments.](#)
  - [Respond when someone gets sick.](#)
- Event organizers and staff also may consider implementing multiple strategies to [maintain healthy operations.](#)

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## COMMUNITY AND FAITH-BASED ORGANIZATIONS

- Local leaders and community organizers play a vital role to bring the community together to help plan for and reduce the effect of a potential COVID-19 outbreak. Since you know your community members the best, you can ensure groups most vulnerable to COVID-19 (such as racial and ethnic minority groups) are considered and included in the planning process.
- CDC recommends finding out if your local government has a private-public emergency planning group that meets regularly that you can join. If not, suggest one that should be set up. Building strong alliances before an outbreak can help provide your organization with the support and resources needed.
- CDC has created [interim guidance](#) to help you create an emergency plan for your community and faith-based organization.

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## U.S. CHILDCARE PROGRAMS, K-12 SCHOOLS, AND INSTITUTIONS OF HIGHER EDUCATION

- Schools should plan for and prepare for a potential community-level outbreak of COVID-19. Fortunately, many of the steps to plan and prepare for COVID-19 are the same steps schools take to keep students healthy and safe from the flu.
- CDC recommends working with local and state health officials to determine if, when, and for how long schools may need to be dismissed in the event of an outbreak.
- School administrators should plan to provide critical support services, such as continuity of education and continuity of school meal programs, while schools are dismissed.
- CDC has posted [guidance for childcare and K-12 school settings](#) on its website.
- CDC has posted [supplemental guidance for childcare programs](#) on its website.
- CDC has posted [guidance for institutions of higher education](#) (IHE) on its website.
  - This guidance includes considerations about addressing campus housing. [Guidance for IHE with students participating in international travel or study abroad programs](#) is also available.

- CDC has posted resources to help K-12 schools and institutes of higher education consider and implement monitoring and evaluating strategies, including
  - [Considerations for Monitoring and Evaluation of Mitigation Strategies Implemented in K-12 Schools](#)
  - [Considerations for Monitoring and Evaluation of Mitigation Strategies Implemented in Institutes of Higher Education](#)
  - [Checklist of Key Considerations When Planning for Monitoring and Evaluation of COVID-19 Mitigation Strategies Implemented in K-12 Schools](#)

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## HOMELESS SHELTERS

- People experiencing homelessness may be at risk for infection during an outbreak of COVID-19.
  - Some people who are experiencing unsheltered homelessness may be at higher risk of moderate to severe disease because of age or serious underlying health conditions.
  - CDC has created [interim guidance for homeless shelters](#) that address planning for and responding to COVID-19 in these settings.
  - CDC has also posted [Interim Guidance for Responding to COVID-19 among People Experiencing Unsheltered Homelessness](#).
  - CDC has [Interim Considerations for Health Departments for SARS-CoV-2 Testing in Homeless Shelters and Encampments](#)
  - For staff working in homeless shelters, CDC has updated the [Homeless Shelter Worker Training](#).

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## CORRECTIONAL AND DETENTION FACILITIES

- People who are incarcerated or detained are at risk for COVID-19 if the virus is introduced to the facility.
  - Social distancing is often not feasible in correction and detention facilities, especially when there is overcrowding.
  - People in correctional and detention facilities may not be able to practice good hand hygiene.
  - People incarcerated or detained may be at additional risk due to chronic or underlying health conditions, which disproportionately affects this population, independent of age.
  - Staff working in correctional and detention facilities are at risk of COVID in the community, as well as within the correctional and detention facility.
  - A [recent study](#) showed that as of June 6, 2020, 1 in 30 people who are incarcerated or detained were infected with COVID-19, compared with 1 in 170 people in the general population. This means that the COVID-19 risk for people who are incarcerated or detained is over 5 times higher.
    - [According to the U.S. Immigration and Customs Enforcement, 18.7% out of 28,888 detainees tested were infected with COVID-19 \(as of 9/1/2020\)](#).
  - Testing for early detection, infection control and prevention protocols, good hygiene practices, cloth face coverings, and physical distancing wherever possible work together to mitigate spread in prisons and detention facilities.
  - CDC has [Interim guidance for management of COVID in correctional and detention facilities](#).
  - CDC has [Interim guidance on testing in correctional facilities](#).

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## PARKS AND RECREATIONAL FACILITIES

- Information for Park Visitors:

- Staying [physically active](#) is one of the best ways to keep your [mind](#) and body healthy.
- In many areas, people can visit parks, trails, and open spaces as a way to relieve stress, get some fresh air and vitamin D, stay active, and connect safely with others.
- While these facilities and areas can offer health benefits, it is important that you [follow the steps](#) to protect yourself and others from COVID-19.
- Information for Park Administrators:
  - Parks, trails, and open spaces can provide opportunities for physical activity and respite, contributing to health and wellness.
  - Individuals are encouraged to use parks, trails, and open spaces safely while following current guidance to [prevent the spread of COVID-19](#).
  - CDC offers [guidance](#) for the use and administration of local, state, and national parks.

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## LAW ENFORCEMENT

- CDC has developed [recommendations for law enforcement](#) to protect themselves from exposure.
  - Law enforcement who must make contact with individuals confirmed or suspected to have COVID-19 should follow [CDC's Interim Guidance for EMS](#).
  - Have a trained Emergency Medical Service/ Emergency Medical Technician (EMS/EMT) assess and transport anyone you think might have COVID-19 to a healthcare facility.
  - Ensure only trained personnel wearing appropriate personal protective equipment (PPE) have contact with individuals who have or may have COVID-19.
- Different styles of PPE may be necessary to perform operational duties.
  - These alternative styles (i.e. coveralls) must provide protection that is at least as great as that provided by the minimum amount of PPE recommended.
- Learn your employer's plan for exposure control and participate in all-hands training on the use of PPE for respiratory protection, if available.
- If close contact occurs during apprehension:
  - Clean and disinfect duty belt and gear prior to reuse. Use a household cleaning spray or wipe, according to the product label.
  - Follow standard operating procedures for the containment and disposal of used PPE.
  - Follow standard operating procedures for containing and laundering clothes. Avoid shaking the clothes.

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## MEAT AND POULTRY PROCESSING FACILITIES

- CDC and the Occupational Safety and Health Administration (OSHA) developed [Interim Guidance for Meat and Poultry Processing Workers and Employers](#) to help these facilities decrease the [spread of COVID-19](#) and lower its impact on the workplace.
- Meat and poultry processing facilities are critical infrastructure, and health and safety practices for critical infrastructure workers should be implemented.
- These recommendations are discretionary and not required or mandated by CDC.
- Management should conduct worksite assessments to identify COVID-19 risks and prevention strategies and develop a COVID-19 infection control plan.
- Workers involved in meat and poultry processing are not exposed to the virus that causes COVID-19 through the meat products they handle. However, their work environments—processing lines and other areas in busy plants where they have close contact with coworkers and supervisors—may contribute substantially to their potential exposures. Racial and ethnic minority individuals are disproportionately represented among those workers.

- Meat and poultry processing employers should implement a combination of engineering controls, cleaning and disinfection, social distancing, work practice controls, administrative controls, and use of personal protective equipment.
- Basic worker infection prevention information and training, including training on social distancing and ways to reduce the spread of infection, should be provided for all workers in a language and at a literacy level that they understand.

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## AGRICULTURAL WORKERS AND EMPLOYERS

- CDC and the U.S. Department of Labor developed [Interim Guidance for Agricultural Workers and Employers](#) to help these workers and their employers prevent and control the spread of COVID-19.
- Management in the agriculture industry should conduct [work site assessments](#) to identify COVID-19 risks and infection prevention strategies to protect workers.
- Worksite guidance for COVID-19 prevention and control should be taken into consideration in employer-provided shared worker housing, transportation vehicles, and work settings.
- Basic information and training about infection prevention should be provided to all farmworkers in [languages](#) they can understand.
- Agriculture work sites developing plans for continuing operations where COVID-19 is spreading among workers or in the surrounding community should work directly with appropriate [state and local public health officials](#) and occupational safety and health professionals.

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## COMMUNITY DECISION TOOLS FOR REOPENING

- CDC released six decision tools for settings including [camps](#), [schools](#), [childcare facilities](#), [restaurants and bars](#), [mass transit](#), and [workplaces with employees at higher risk](#) for severe COVID-19 illness.
- These decision tools can assist government, business, and community leaders in thinking through health considerations and making operational decisions during the COVID-19 pandemic.
- The decision tools include questions and considerations organizations should think through when deciding how to scale up their operations.
  - These resources do not supersede state, tribal, local, and territorial public health recommendations.
- The decision and strategy tools emphasize the importance of working with appropriate health officials and being flexible to the unique needs and circumstances within communities.
- These tools can be implemented at the state, tribal, local, and territorial levels. Every locale is different and individual jurisdictions have the authority and local awareness needed to protect their communities.
- These critical resources complement other guidance CDC has released to help communities plan for, respond to and recover from COVID-19.
- CDC will continue to update these resources and may release additional resources to help government, business, and community leaders as they implement, adapt, and adjust COVID-19 mitigation strategies in their communities.

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## CONSIDERATIONS AFTER RE-OPENING

- CDC has published health consideration documents to help [Institutes of Higher Education](#), [Restaurants and Bars](#), [Schools](#), [Youth and Summer Camps](#), and [Youth Sports](#) to operate as safely as possible during the COVID-19 pandemic.
- Considerations documents are concrete, actionable resources that focus on four categories of safeguards:
  - promoting behaviors to reduce spread,
  - maintaining healthy environments,

- maintaining healthy operations, and
- preparing for when someone gets sick.
- Combining multiple safeguards can reduce the spread of COVID-19.
  - Leveraging multiple layers of protections is a common, effective public health strategy.
  - Stacking best practices—with several layers of safeguards to reduce the spread of COVID-19 and lower the risk of another spike in cases and deaths—is necessary to manage this pandemic while re-engaging our economy.
- The considerations documents compliment other CDC resources that help inform decisions about resuming and gradually scaling up operations in community settings.

## CLEANING & DISINFECTING FOR PUBLIC SPACES, WORKPLACES, BUSINESSES

### DEVELOP YOUR PLAN

- Determine what needs to be cleaned: areas unoccupied for 7 or more days need only routine cleaning. Maintain existing cleaning practices for outdoor areas.
- Determine areas will be disinfected: consider the type of surface and how often the surface is touched. Prioritize disinfecting frequently touched surfaces.
- Consider the resources and equipment needed: keep in mind the availability of cleaning products and personal protective equipment (PPE) appropriate for cleaners and disinfectants.
- Implement
- Clean visibly dirty surfaces with soap and water before disinfection.
- Use the appropriate cleaning or disinfectant product: use an EPA-approved disinfectant against COVID-19 and read the label to make sure it meets your needs.
- Always follow the directions on the label: the label will include safety information and application instructions. Keep disinfectants out of the reach of children.

### MAINTAIN AND REVISE

- Continue routine cleaning and disinfection: continue or revise your plan based upon appropriate disinfectant and PPE availability. Dirty surfaces should be cleaned with soap and water prior to disinfection. Routinely disinfect frequently touched surfaces at least daily.
- Maintain safe practices such as frequent handwashing, using masks, and staying home if you are sick.
- Continue practices that reduce the potential for exposure: maintain social distancing, staying six feet away from others. Reduce sharing of common spaces and frequently touched objects.

## GUIDANCE FOR HEALTHCARE PROVIDERS HEALTHCARE SETTINGS

### INFECTION PREVENTION AND CONTROL

- Protecting the nation’s healthcare workforce continues to be an urgent priority for CDC’s response to COVID-19. One important measure to protect healthcare personnel is to reduce their risk for exposure in the workplace.
  - Recognizing that COVID-19 can be spread by people who do not have symptoms (asymptomatic) or who eventually develop symptoms (pre-symptomatic) to other people, CDC is recommending all U.S. healthcare facilities put policies into place requiring everyone entering the facility to practice source control, regardless of symptoms. This includes all healthcare personnel, patients, and visitors.
  - Cloth face coverings are not PPE and it is not known whether or to what extent cloth face coverings

protect the wearer.

- Healthcare personnel (HCP) should wear a facemask at all times while they are in a healthcare facility.
  - When available, facemasks are generally preferred over cloth face coverings for HCP as facemasks offer both source control and protection for the wearer against exposure to splashes and sprays of infectious material from others.
  - If there are anticipated shortages of facemasks, facemasks should be prioritized for HCP and then for patients with symptoms of COVID-19, as supply allows.
  - Cloth face coverings should NOT be worn instead of a respirator or facemask if more than source control is required.
  - Some HCP whose job duties do not require PPE (e.g., clerical personnel) can wear their cloth face coverings for source control throughout the time they are in the healthcare facility.
  - HCP providing direct patient care, such as doctors or nurses, can wear their cloth face coverings for part of the day when not engaged in direct patient care activities, but switch to respirators or facemasks when PPE is required for patient care.
  - HCP should consider continuing to wear their respirators or facemasks ([extended use](#)) instead of intermittently switching back to their cloth face coverings, which could cause self-contamination.
  - HCP should remove their respirators or facemasks and put on their cloth face coverings when leaving the facility at the end of their shift.
- Visitors and patients should, ideally, be wearing their own cloth face coverings upon arrival to the facility per [CDC recommendations to the general public](#). If they are not, they should be offered a facemask or cloth face covering as supplies allow and instructed to wear it while they are in the facility.
  - Facemasks should be reserved for HCP, unless supplies allow wider distribution.
- Healthcare facilities are responsible for protecting their HCP from exposure to pathogens, including by providing appropriate PPE and training for HCP. Healthcare facilities should:
  - Implement sick leave policies that are non-punitive, flexible, and consistent with public health guidance.
  - Actively screen everyone for fever and symptoms of COVID-19 before they enter the facility.
  - Provide job-specific training for HCP on PPE, including demonstrated competency with selection and proper use (e.g., putting on and removing without self-contamination).
  - Provide training about when, how, and where cloth face coverings can be used (e.g., frequency of laundering, guidance on when to replace, circumstances when they can be worn in the facility, importance of hand hygiene to prevent contamination).
- Healthcare facilities are increasingly unable to procure reliable and sufficient supplies for infection control, including N95 respirators.
- Protection of healthcare personnel is a priority. CDC's updated guidance on infection control aims to prioritize the use of N95 respirators and other respiratory protection devices for use during high-risk procedures while still protecting healthcare personnel with facemasks and eye protection during other routine patient care activities, in the setting of respirator shortages.
- The guidance also outlines multiple interventions that can be implemented to enhance protection of healthcare personnel
- CDC guidance updates the PPE healthcare personnel should use when caring for patients with known or suspected COVID-19:
  - Eye protection, gown, and gloves continue to be recommended.
  - While respirators remain preferred, facemasks are an acceptable alternative until the supply chain is restored.
    - Facemasks protect the wearer from splashes and sprays.



- Respirators, which filter inspired air, offer respiratory protection.
  - Respirators should be prioritized for procedures that are likely to generate respiratory aerosols, which would pose the highest exposure risk to healthcare professionals.
- The risk of transmission can be reduced by several types of actions, like prompt screening and triage, limiting personnel in the room, hand hygiene, source control, and effective environmental cleaning.
- CDC reminds all employers and healthcare personnel about the hierarchy of controls.
  - PPE is only one aspect of patient and worker safety and involves a high level of worker involvement and is highly dependent on proper fit and correct use.
- All healthcare facilities should continuously review their infection control supply inventories and taking steps to optimize supplies.
  - This is particularly true for areas in facilities where aerosol-generating procedures are performed, so that appropriate PPE will be available for high-risk procedures now and as potential COVID-19 cases increase.
- Healthcare administrators should continue to do everything possible to acquire the needed supplies to protect their staff and patients.
- When the supply chain is restored, facilities with a respiratory protection program should return to use of respirators for patients with known or suspected COVID-19.
- The anticipated timeline for return to routine levels of PPE is not known.
  - CDC has posted information about [strategies to optimize the current supply of N95 respirators](#), including the use of devices that provide higher levels of respiratory protection (e.g., powered air purifying respirators [PAPRs]) when N95s are not available.
  - CDC has also posted a [companion checklist](#) to help healthcare facilities prioritize the implementation of the strategies is available.
- Most nursing homes and outpatient clinics, including hemodialysis facilities, do not typically procure N-95 respirators, currently have respiratory protection programs, nor fit-tested HCP. Therefore, they would not be able to implement all the recommended infection control interventions for care of COVID-19 patients.
  - Without respiratory protection programs and fit testing, unnecessary transfer of stable patients with known or suspected COVID-19 to another facility (e.g., acute care hospital) for evaluation and care may occur.
  - In areas with community transmission, acute-care facilities will be quickly overwhelmed by transfers of patients who have only mild illness and do not require hospitalization.
- Infection control procedures and appropriate use of PPE are necessary to prevent infections from spreading while caring for patients. CDC reminds all employers and HCP that PPE is only one aspect of safe care of patients with COVID-19.
  - Focusing only on PPE gives a false sense of security of safe care and worker safety.
  - It is critical to focus on other strategies to prevent spread of COVID-19 in healthcare settings. Examples include prompt screening and triage of patients and limiting the numbers of healthcare personnel entering the patient room.
- Healthcare personnel caring for patients with confirmed or suspected COVID-19 should adhere to CDC recommendations for [infection prevention and control \(IPC\)](#):
  - Assess and triage patients with acute respiratory symptoms and risk factors for COVID-19 to minimize chances of exposure. Care for patients with known or suspected COVID-19 in a single-person room with the door closed. Reserve Airborne Infection Isolation Rooms (AIIRs) for patients undergoing aerosol-generating procedures.
  - Use [Standard, Contact, and Airborne](#) Precautions, including eye protection, when caring for patients with confirmed or possible COVID-19.

- Perform hand hygiene with alcohol-based hand sanitizer before and after all patient contact, before and after contact with potentially infectious materials, and before putting on and upon removal of PPE, including gloves. Use soap and water if hands are visibly soiled.
- Practice how to properly [don, use, and doff PPE](#) in a manner to prevent self- contamination.
- Perform aerosol-generating procedures (e.g., sputum induction, open suctioning of airways) in an AIRR, while following appropriate IPC practices, including use of appropriate PPE.
- The collection of respiratory specimens (e.g., nasopharyngeal swabs) are not considered aerosol generating procedures. These procedures should take place in an examination room with the door closed.
- Healthcare facilities can minimize the chance for exposures by ensuring facility policies and practices are in place and implemented before patient arrival, upon patient arrival, and throughout the duration of the affected patient’s time in the healthcare setting.
- All healthcare facilities should ensure that their healthcare personnel are correctly trained and capable of implementing infection control procedures. Individual healthcare personnel should ensure they understand and can adhere to infection control requirements.
- Routine cleaning and disinfection procedures are appropriate for the virus that causes COVID-19 in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed.
  - Products with [EPA-approved emerging viral pathogens claims](#) are recommended for use against the virus that causes COVID-19, the virus that causes COVID-19.
- Management of laundry, food service utensils, and medical waste should also be performed in accordance with routine procedures. Federal, state, and local guidelines and regulations specify the categories of medical waste that are subject to regulation and outline the requirements associated with treatment and disposal.
- CDC has released a [framework to support healthcare practices and systems as they provide clinical care for patients with conditions other than COVID-19](#).
  - Clinical services should be prioritized for patients most at risk if care is delayed. This includes high-risk populations such as people with serious underlying health conditions and people without access to telehealth.
  - Facilities should follow existing [CDC guidance](#) to reduce the risk of patient and healthcare provider exposure to COVID-19 during care.
  - Healthcare practices and systems should work with state and local public health officials as they make decisions about providing non-COVID-19 clinical care.
    - Public health departments can provide information to support decision making, including local COVID-19 transmission trends and region-specific recommendations.
  - Healthcare practices and systems should prioritize clinical services for patients most at risk if care is otherwise delayed.
    - Examples of this type of care include symptoms of stroke or heart attack, dental emergencies, treatment for a new cancer diagnosis, and well-child visits for newborns.
    - Even in areas with high local COVID-19 transmission, these types of care should not be delayed.
  - Many healthcare practices and systems will expand clinical services gradually.
  - As they consider their ability to expand services beyond urgent and emergent care services to include routine visits and elective procedures, facilities and providers will need to ensure they have adequate staffing, bed capacity, and personal protective equipment and supplies.
  - Healthcare practices and systems should provide clinical services in the safest way possible for both patients and healthcare workers by optimizing telehealth services, when available and appropriate, and following recommended infection control practices.

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## CARING FOR NEWBORNS

- Current evidence suggests that SARS-CoV-2 infections in newborns are uncommon.
  - Transmission of SARS-CoV-2 occurs primarily through respiratory droplets when newborns are exposed to mothers or other caregivers who are infected. Rates of infection in newborns do not appear to be affected by mode of delivery, method of feeding, or contact with a mother with suspected or confirmed COVID-19.
  - If newborns do become infected, the majority have either asymptomatic infections or mild disease (i.e., do not require respiratory support), and they recover.
  - Severe illness in newborns has been reported but appears to be rare.
  - Newborns with underlying medical conditions and preterm infants (<37 weeks gestational age) may be at higher risk of severe illness from COVID-19.
- [Testing](#) is recommended for all newborns born to mothers with suspected or confirmed COVID-19, regardless of whether there are signs of infection in the newborn.
- Mothers with suspected or confirmed SARS-CoV-2 infection and their newborns should be isolated from other healthy mothers and newborns and cared for according to recommended [infection prevention and control practices](#) for routine healthcare delivery.
- There is no difference in risk of SARS-CoV-2 infection to the newborn whether cared for in the mother's room or in a separate room.
  - A mother with COVID-19 and her healthcare providers should discuss whether the newborns should be cared for in her room or a separate location.
  - Healthcare providers should respect maternal autonomy in the medical decision-making process.
- Newborns who meet clinical criteria for discharge do not require the results of SARS-CoV-2 testing for discharge. Newborns with suspected or confirmed COVID-19, or ongoing exposure, require close outpatient follow-up after discharge.
- Breastfeeding remains the recommended method of infant feeding.
- All caregivers should practice infection prevention and control measures (i.e., wearing a mask, practicing [hand hygiene](#)) before and while caring for a newborn, including when mothers are breastfeeding.

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## DENTAL SETTINGS

- As the COVID-19 pandemic evolves, dental settings are preparing their practices to deliver non-emergency dental care.
- CDC has updated its [guidance for dental settings](#) to include recommendations for dental healthcare facilities as they begin to restart elective procedures (non-emergency dental care) in accordance with guidance from local and state officials.
- Dental settings should balance the need to provide necessary services while minimizing risk to patients and dental healthcare personnel (DHCP).
- CDC has developed a [framework](#) for healthcare personnel and healthcare systems for delivery of non-emergent care during the COVID-19 pandemic. DHCP should regularly consult their state dental boards and [state or local health departments](#) for current local information for requirements specific to their jurisdictions, including recognizing the degree of community transmission and impact, and their region-specific recommendations.
- DHCP should wear a surgical mask or cloth face covering at all times while they are in the dental setting.
  - DHCP should continue to practice universal source control and actively screen for fever and symptoms of COVID-19 for everyone entering the dental facility.

- The definition of fever has been updated to either measured temperature  $\geq 100.0^{\circ}\text{F}$  or subjective fever to align with [CDC's Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 \(COVID-19\) in Healthcare Settings](#).
- For patients who arrive at the facility with suspected or confirmed COVID-19, dental treatment should be deferred unless medically necessary.
- For patients who do not exhibit COVID-19 symptoms, treatment may be provided only after assessing and considering the risks to the patient and DHCP.
- In areas with moderate to substantial community transmission, during encounters with patients not suspected of SARS-CoV-2 infection, CDC recommends that DHCP wear eye protection in addition to their facemask to ensure the eyes, nose, and mouth are all protected from exposure to respiratory secretions during patient care encounters, including those where splashes and sprays are not anticipated.
- DHCP should regularly consult their state dental boards and state and local health departments as they make decisions about providing non-emergency dental care in their practice.
  - In communities experiencing no transmission or minimal community transmission of COVID 19, dental settings can provide non-emergency dental care to patients without suspected or confirmed COVID-19 using CDC's [Standard Precautions](#).
    - Given that transmission patterns can change and patients may be able to spread the virus without showing symptoms, it is recommended that DHCP practice according to [CDC's Interim Infection Prevention and Control Guidance for Dental Settings](#) whenever feasible.
  - In communities experiencing minimal to moderate or substantial COVID-19 transmission, dental settings should provide dental care to patients without suspected or confirmed COVID-19 using special considerations to protect DHCP and patients as described in [CDC's Interim Infection Prevention and Control Guidance for Dental Settings](#).
- CDC continues to recommend full PPE including an N95 or higher-level respirator, eye protection, gloves, and a gown for aerosol generating procedures conducted on patients with confirmed or suspected SARS-CoV-2 infection
- If PPE and supplies are limited, dental healthcare practices should prioritize dental services for patients most at risk if care is delayed.
  - CDC has developed a [series of strategies to optimize supplies of PPE](#) in healthcare settings when there is limited supply, and a [burn rate calculator](#) that provides information for healthcare facilities to plan and optimize the use of PPE for response to the COVID-19 pandemic.
- If DHCP experience a potential work exposure to SARS-CoV-2, follow CDC's [Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to COVID-19](#).
- Information about when DHCP with suspected or confirmed COVID-19 may return to work is available in the [Interim Guidance on Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19](#).
- Dental healthcare delivery requires close physical contact between patients and DHCP. However, when possible, social distancing (maintaining at least 6 feet between people) is an important strategy to prevent SARS-CoV-2 transmission. For DHCP, the potential for exposure to SARS-CoV-2 is not limited to direct patient care interactions. Transmission can also occur through unprotected exposures to asymptomatic or pre-symptomatic co-workers in breakrooms or co-workers or visitors in other common areas.
- People with SARS-CoV-2 infection who have [ended home isolation](#) can receive dental care following [Standard Precautions](#).

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## LONG-TERM CARE FACILITIES

- Nursing home populations are vulnerable to COVID-19.
- Ill visitors, healthcare personnel, and other facility staff are the most likely source of introduction of COVID-19 into nursing homes.
- In order to protect residents and nursing home staff, facilities need to take aggressive measures to limit COVID-19 exposure and prevent spread.
- The general strategies CDC recommends to prevent the spread of COVID-19 in long-term care facilities (LTCF) are the same strategies these facilities use every day to detect and prevent the spread of other respiratory viruses like influenza.
- CDC has issued [recommendations every LTCF can follow](#) to—
  - Keep COVID-19 from entering their facility
  - Identify infections in residents and staff early
  - Prevent the spread of COVID-19 in their facility
  - Assess and optimize supply of personal protective equipment (PPE)
  - Identify and manage severe illness
- LTCFs should screen of residents and healthcare personnel for fever and respiratory symptoms. This will help facilities react quickly to contain spread of COVID-19 and ensure residents receive appropriate care when sick.
- As part of source control efforts, HCP should wear a facemask or cloth face covering at all times while they are in the healthcare facility.
- CDC has updated its [guidance](#) to help nursing homes add testing to other infection prevention and control practices to keep COVID-19 out, detect cases quickly, and stop transmission. When used together, nursing homes have a more robust strategy to protect residents and staff.
  - Testing is just one part of a comprehensive infection prevention and control program and should be implemented in addition to existing infection prevention and control interventions.
  - CDC recommends that nursing homes that have identified a new confirmed COVID-19 case consider performing facility-wide testing among nursing home residents and staff.
- CDC's National Healthcare Safety Network (NHSN) provides nursing homes with a customized system to track infections and prevention measures in a systematic way.
  - NHSN is the nation's most widely used healthcare-associated infection tracking system.
  - NHSN identifies problem areas, measures progress of prevention efforts, and ultimately can help to eliminate healthcare-associated infections.
  - Facilities, states, regions, and the nation can use NHSN data to know when action is needed to stop healthcare-associated infections.
  - [The Centers for Medicare and Medicaid Services](#) (CMS) now requires nursing homes to report COVID cases through NHSN's new [COVID-19 module](#). Nursing homes should report cases, facility staffing, and supply information.
- Nursing homes may need to continue to restrict all visitors, including residents' family and friends, except in end of life situations.
  - This restriction may be difficult for residents and their families, but this is an important temporary measure to protect residents.
  - Facilities should work to implement alternative solutions, including the use of web- based services like video chat. Regular communication with residents and their families is an important factor in the well-being of the residents.
- CMS recently issued [Nursing Home Reopening Guidance](#) that outlines criteria to help determine when nursing homes may be able to relax restrictions on visitation and group activities.

- Nursing homes should consider the current situation in their facility and the community and refer to guidance and direction from local and state officials, when making decisions about relaxing restrictions.
- Nursing homes that begin to relax restrictions must remain vigilant for COVID-19 among residents and healthcare personnel to prevent spread and protect against severe infections, hospitalizations, and death.
- As the COVID-19 pandemic evolves, CDC has updated its [guidance for assisted living facilities \(ALFs\)](#) to help them prevent spread of COVID-19 as they begin to relax restrictions on visitors and group activities.
  - Assisted living facilities should refer to state and local officials for guidance on making decisions about relaxing restrictions (e.g., easing visitor restrictions, allowing group activities and communal dining).
  - State licensing authorities overseeing assisted living facilities should share CDC's updated guidance with all such facilities in their jurisdiction. [State healthcare-associated infections programs](#) can help assisted living facilities respond to COVID-19 and implement recommended practices.
  - CDC recommends source control measures for anyone in public, including when in a setting like an assisted living facility.
    - Personnel and visitors should always wear a facemask or cloth face covering while in the facility. Residents should be encouraged to wear a cloth face covering whenever they are around others inside or outside of the facility.
      - Cloth face coverings are not considered PPE and should not be worn by personnel instead of a respirator or facemask if more than source control is required.
    - Assisted living facilities should encourage personnel and residents to practice social distancing.
    - Facilities should provide access to appropriate supplies so personnel can follow CDC's recommended infection prevention and control practices.
  - When relaxing restrictions, assisted living facilities should continue to monitor for COVID-19 among residents and personnel in order to prevent spread and protect residents and personnel.
    - Assisted living facilities should promptly notify the state or local health department about residents or personnel with suspected or confirmed COVID-19 to help ensure all recommended infection prevention and control measures are in place.
    - Residents and personnel with suspected COVID-19 should be prioritized for testing.
  - Assisted living facilities should encourage residents to limit outside visitors, even as restrictions being to relax.
    - Alternative visitation methods should be facilitated to protect the residents and personnel who may be more vulnerable to severe illness from COVID-19.
    - CDC recommends Assisted living facilities actively screen all visitors and personnel for fever and [symptoms of COVID-19](#) before entering the facility.
    - Anyone exhibiting a fever or symptoms of COVID-19 should be sent home.

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## DIALYSIS SETTINGS

- Dialysis is a lifesaving therapy and patients cannot postpone treatments.
- Hemodialysis patients are at increased risk of severe illness from COVID-19 due to end-stage renal disease (ESRD) and other underlying medical conditions.
- Dialysis facilities should follow [CDC guidance](#) to protect vulnerable patients and facility staff from respiratory infections, including COVID-19.
- CDC released a suite of [outpatient hemodialysis infection prevention materials](#) to support the implementation of COVID-19 prevention strategies so that dialysis patients can continue to receive the care they need.

- COVID-19 is being reported in communities across the United States. Dialysis facilities should ensure they are implementing infection prevention and control measures.
  - Patient-specific and facility-wide measures should be implemented immediately, regardless of whether COVID-19 cases are suspected or confirmed in the facility.
- All outpatient dialysis facilities should ensure their staff are trained, equipped, and capable of practices needed to
  - Prevent the spread of respiratory infections, including COVID-19, within the dialysis facility.
  - Promptly identify and isolate patients with suspected COVID-19 and inform the correct dialysis facility staff and public health authorities.
  - Provide dialysis for patients with suspected or confirmed COVID-19 as part of routine operations.
  - Prepare to provide dialysis for an increasing number of COVID-19 patients in the context of an escalating outbreak.
  - Monitor and manage any healthcare personnel that might be exposed to COVID-19.
  - Assess and optimize supply of personal protective equipment (PPE).
- It is essential to identify patients with signs or symptoms of COVID-19 *before* they enter the facility. A multi-step screening process to assure patients do not enter the treatment area without being screened is critical.
  - [CDC guidance](#) provides strategies for dialysis facilities to prepare for patient arrival, to screen and place patients appropriately, and to properly clean and disinfect the facility following treatment.
    - Because an infected person can spread the virus that causes COVID-19 before showing symptoms or without ever showing symptoms, everyone entering the dialysis facility including healthcare personnel, patients, and visitors should be wearing a cloth face covering or facemask for source control regardless of their symptoms.
      - Cloth face coverings are not considered PPE.
      - Facemasks, if available, should be reserved for healthcare personnel.
      - If a visitor or a patient arrives without a face covering, provide them with one.
- Facilities should consider cohorting patients with suspected or confirmed COVID-19 in the same section of the unit, same shift of the day, or even designating facilities for COVID-19 patients.

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## PHARMACY SETTINGS

- During the COVID-19 pandemic, pharmacy staff can [minimize their risk of exposure](#) while continuing to play an important role in providing healthcare services.
- All pharmacies can implement the strategies to keep staff and customers healthy.
  - Require everyone entering the pharmacy to wear a mask, regardless of symptoms.
  - Ensure pharmacists and pharmacy technicians always wear a facemask while they are in the pharmacy for source control.
  - Advise pharmacy staff who have fever or symptoms consistent with COVID-19 to stay home while sick. Ensure flexible, non-punitive sick leave policies.
  - Ask prescribers to submit prescription orders to pharmacies via telephone or electronically.
  - Encourage customers to pick up orders by drive-through windows, curbside pick-up, or home delivery.
  - Ask sick customers to stay home and request home delivery of medications.
  - Limit physical contact with customers and their items.
  - Promote the use of self-serve checkout registers and clean them frequently.
  - Use telehealth or tele-pharmacy strategies to provide chronic disease management services, medication management services, and other non-product, patient-oriented services.
  - Take steps in the pharmacy to limit possible exposure of pharmacy staff and customers, such as
    - Limiting the number of customers in the pharmacy area at any given time,

- Using signage to encourage social distancing,
  - Removing shared items like magazines,
  - Closing self-serve blood pressure monitors, and
  - Frequently cleaning and disinfecting all customer service counters and customer contact areas.
- Create separation between sick people who are seeking care at co-located retail clinics and other customers.
- Postpone and reschedule some routine clinical preventive services, such as adult immunizations, which require face to face encounters.
- Pharmacies that are participating in public health testing for COVID-19 and other close-contact patient care procedures should—
  - Communicate with local and state public health staff to—
    - determine which persons meet the criteria for COVID-19 testing
    - clarify procedures for the collection, storage, and shipment of COVID-19 specimens
  - Follow all relevant [infection control guidance for healthcare professionals](#).
  - Be provided with appropriate PPE and training on its proper use.

## WHAT CDC IS DOING TO PROTECT HEALTHCARE PERSONNEL

- Protecting healthcare personnel is a CDC priority and continues to be an urgent focus of the nation’s public health response to COVID-19. Additionally, employers have a responsibility to protect HCP to the greatest extent possible.
- CDC is preparing first responders, healthcare providers, and health systems, by:
  - Establishing visibility across healthcare systems to understand healthcare use, particularly surges in demand for medical care and associated resources.
  - Conducting extensive outreach to clinical and hospital professional organizations to ensure health system preparedness.
  - Producing guidance documents on infection control, hospital clinical evaluation and patient management.
  - Working closely with healthcare facilities and providers to reinforce infection control principles that recognize PPE is one component of a larger set of practices that help to limit the spread of disease.
  - Developing a range of respirator conservation strategies, including strategies to make supplies last longer (such as using alternative products like reusable respirators) and extending the use of disposable respirators.
  - Leveraging existing telehealth tools to direct people to the right level of care.
  - Working with supply chain partners to understand supply usage, what products are available, and when more aggressive measures may need to be taken to ensure that HCPs at highest risk have access to PPE.
  - Sharing information with stakeholders to help them recognize when to shift the strategies they are using.
- Healthcare personnel (HCP) often have prolonged close contact with patients in healthcare settings and may come in contact with a person infected with COVID-19. HCPs can protect themselves by properly following recommended infection control practices, including the appropriate use of PPE when caring for patients with COVID-19.
- CDC recommends evaluating asymptomatic HCPs with close contact or a potential exposure to COVID-19 by assessing risk, monitoring symptoms, and determining the need for appropriate work restrictions.
- CDC has been responding aggressively to advise healthcare personnel and keep them safe as this crisis continuously evolves.
  - CDC is regularly developing and updating guidance, resources, and practical tools to prevent COVID-19 cases among healthcare personnel across various settings as more is learned about the virus and how it



- spreads.
- CDC has released strategies to help healthcare facilities and personnel make the best use of available personal protective equipment (PPE) if they experience a lack of supplies due to COVID-19-related strains on the U.S. healthcare system.
- CDC is recommending strategies to reduce risk for healthcare personnel and everyone by promoting universal use of facemasks in healthcare settings for source control and identifying ways to safely reuse limited supplies of PPE.
- Many CDC staff are also practicing doctors, nurses, and healthcare personnel, standing with colleagues on the front lines of this pandemic.

## OPTIMIZING THE SUPPLY OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

- The outbreak of COVID-19 has led to a disruption in the global supply chain of PPE, particularly of N95 respirators.
- CDC recognizes that healthcare facilities may experience temporary shortages even if they do not care for patients with COVID-19.
- The COVID-19 pandemic is unprecedented and has directly impacted supply chains for tools needed by healthcare systems.
  - In response, CDC released [PPE optimization strategies](#) for eye protection, isolation gowns, facemasks, and N95 respirators.
  - PPE is needed not only to protect healthcare personnel against COVID-19, but also for personnel caring for patients with other serious infections like active TB and measles.
- Employers have a responsibility to protect patients and healthcare personnel to the greatest extent possible.
  - When PPE is available, it needs to be made available to healthcare personnel under the facility's optimization plan.
- CDC released strategies to help healthcare facilities and providers conserve PPE during times of COVID-19-related strain on the U.S. healthcare system. These strategies include considerations like what PPE to use, when to use it, and for how long.
  - CDC uses three categories (conventional, contingency, and crisis capacities) to describe the levels of PPE a facility has available.
  - Healthcare providers and facilities should use the contingency and crisis strategies according to whether they have expected or current PPE shortages.
  - These strategies provide options for how to provide care and protect healthcare personnel when best practices for infection control cannot be met due to national supply disruptions.
  - The crisis strategies include homemade facemasks as a last-resort strategy.
    - These should *only* be an option when there are absolutely no respirators or facemasks left and should be used with other protective equipment (i.e., face shields).
    - If there are no respirators or facemasks left, and as a last resort, using a homemade facemask may be preferable to not covering one's nose and mouth when providing COVID-19 patient care.
- These strategies also emphasize the need to postpone non-urgent medical visits and procedures in order to reduce the overall burden on the healthcare system. This will reduce PPE use (also called "burn") and help prevent spread of COVID-19.
- All healthcare systems should stretch their PPE supply so that critical procedures can still be performed.
  - Even facilities that do not yet have supply shortages should be practicing optimization strategies that will help prepare them for anticipated supply limitations.
- These strategies do not adhere to the typical standards of care in the United States.
  - These strategies reflect the hard realities on the ground and the best possible approaches for many

- healthcare providers right now.
- These strategies also mean healthcare professionals may have to make hard decisions about how to allocate the resources they have.
  - CDC will continue to revise these strategies as the situation changes.
- PPE is not the only way to keep healthcare providers safe. As PPE supplies diminish, leaning on other strategies becomes increasingly important.
    - Implement practical [engineering and administrative control measures](#) in the continuum of care (e.g., restricting personnel not involved in direct patient care from entry into the patient’s room).
    - Optimize the use of telemedicine.
    - Emphasize hygiene—keeping hands clean can stop the spread of germs between people.
  - CDC has provided additional resources related to these strategies:
    - [Checklist for Healthcare Facilities: Strategies for Optimizing the Supply of N95 Respirators during the COVID-19 Response](#) is intended to help healthcare facilities prioritize the implementation of the strategies presented in the [Strategies for Optimizing the Supply for N95 Respirators](#) guidance.
    - [Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer- Designated Shelf Life: Considerations for the COVID-19 Response](#)
      - In times of increased demand and decreased supply, consideration can be made to use the N95s listed in the guidance past their manufacturer-designated shelf life when responding to COVID-19.
      - This preliminary information from the NIOSH study suggests certain N95 models beyond their manufacturer-designated shelf life will be protective. CDC recommends that N95s that have exceeded their manufacturer-designated shelf life should be used only as outlined in the [Strategies for Optimizing the Supply of N95 Respirators](#).
    - [Personal Protective Equipment \(PPE\) Burn Rate Calculator](#)
      - CDC designed the tool to help healthcare and non-healthcare systems, such as correctional facilities, track how quickly PPE will be used at those facilities.
      - The tool is based on data provided by healthcare systems on use of PPE during responses to infectious disease outbreaks.
      - Healthcare and non-healthcare systems can use the tool to enter the type of PPE they are using, such as gowns, gloves, surgical masks, respirators, and face shields.
        - The spreadsheet is open-ended and can also be used to calculate the use of other types of PPE as well.
      - This tool calculates the average consumption rate, also referred to as a “burn rate.” Healthcare personnel or facilities can use this tool to track the number of full boxes of each component of PPE that they have in stock, such as gowns or respirators.
        - They can enter these numbers to estimate the remaining supply of PPE based on the average consumption rate.
    - CDC released updated guidance on [Strategies to Optimize the Supply of PPE](#) that highlights some strategies—including extended use and reuse without decontamination—that facilities can use in the event of an acute shortage of supply.
      - Many hospitals across the country already have begun using these methods without fully considering the risk-benefit of the methods. This guidance helps provide increased clarity about the benefits and risks of each method.
      - CDC’s new guidance provides information on promising methods for decontamination and methods that are not recommended. The methods that show the most promise are vaporous hydrogen peroxide, ultraviolet germicidal irradiation, and moist heat.

- Research shows some methods are **not** promising because they may change the filtering facepiece respirator's (FFR) performance or function or because of the uncertainties around the carcinogenic properties of the respirator after decontamination. The methods that are **not** promising include:
  - Ethylene oxide
  - Autoclave
  - Dry heat
  - Isopropyl alcohol
  - Soap
  - Dry microwave irradiation
  - Bleach
  - Disinfectant wipes
- At this time, CDC and NIOSH do not recommend that FFRs be decontaminated and then reused. This practice would be inconsistent with their approved use, but in times of crisis, this option may need to be considered.

## MITIGATING HEALTHCARE PERSONNEL STAFFING SHORTAGES

- As the COVID-19 pandemic progresses, healthcare facilities must plan for [potential staffing shortages](#).
- Healthcare facilities and employers should use contingency capacity strategies now to prepare for mitigating this problem.
- Contingency capacity strategies include:
  - Cancel all non-essential procedures and visits, and shift healthcare personnel who work in these areas to support other patient care activities in the facility.
  - Adjust staff schedules, hire additional HCP, and rotate HCP to positions that support patient care activities.
  - Develop regional plans to identify designated healthcare facilities or alternate care sites with adequate staff to care for patients with COVID-19.
  - Healthcare personnel with suspected COVID-19 should be prioritized for testing, as testing results will impact when they may return to work and which patients they might be permitted to care for.
  - Develop plans and criteria for asymptomatic HCP who have had an unprotected exposure to COVID-19 to continue to work.
    - These HCP should still report temperature and absence of symptoms each day before starting work. These HCP should wear facemasks (for source control) while at work for 14 days after the exposure event.
    - If shortages persist despite implementing the strategies above, facilities should develop plans and criteria for allowing HCP with suspected or confirmed COVID-19 who are well enough to return to work, while taking precautions to reduce spread of virus.
- CDC has also provided crisis capacity strategies for healthcare facilities and employers to consider when staffing shortages do occur.

## KEY CONSIDERATIONS FOR TRANSFERRING PATIENTS TO RELIEF HEALTHCARE FACILITIES WHEN RESPONDING TO COMMUNITY TRANSMISSION OF COVID-19

- During the COVID-19 pandemic, health systems and health departments should consider using relief healthcare facilities to reduce the strain on healthcare personnel and resources like personal protective equipment (PPE).

- When the impact of COVID-19 is higher in one region than another, patients could be moved to relief healthcare facilities in less affected areas.
- Rural healthcare facilities should be strongly considered as potential candidates for relief healthcare facilities.
  - Many healthcare facilities in urban settings with high population densities are facing patient surges and resource shortages.
  - Some rural healthcare facilities have more beds, healthcare personnel, and equipment available because of elective medical procedure cancellations, stay-at-home orders, and few COVID-19 patients.
  - Rural healthcare facilities may be at risk of long-term, negative financial effects caused by the reduction in patients and services.
- Using relief healthcare facilities and establishing [Medical Operations Coordination Cells](#) to coordinate the transfer of patients and resources between facilities can help meet system-wide needs to
  - maximize available resources by ensuring that healthcare facilities with a high burden of patients with COVID-19 can shift patients to lower burden relief healthcare facilities quickly and systematically, and
  - support long-term viability of the limited healthcare facilities and personnel available in more rural areas.

## GUIDANCE FOR HEALTHCARE PROVIDERS MANAGING PATIENTS WITH COVID-19

### CLINICAL PRESENTATION

- Most frequently reported symptoms of COVID-19 include fever, cough, sore throat, myalgia, fatigue, or new loss of taste or smell. Older patients and people with underlying medical conditions might be at increased risk of severe illness.
  - Possible risk factors for progressing to severe illness may include, but are not limited to, older age and people of any age with underlying chronic medical conditions such as heart disease, lung disease and diabetes.
- [Signs of COVID-19 in newborns](#) may include fever, lethargy, runny nose, cough, fast breathing, difficulty breathing, vomiting, diarrhea, and difficulty feeding or reduced appetite.
- Most [children with COVID-19](#) have mild illness or are asymptomatic. The most common symptoms of COVID-19 in children are cough and/or fever, and children can have many of the same symptoms as adults.

### CLINICAL COURSE

- Symptoms among reported cases of COVID-19 vary in severity from mild illness to severe or fatal illness.
- Some reports suggest the potential for clinical deterioration during the second week of illness.
- Among hospitalized patients with confirmed COVID-19, some will develop complications:
  - Pneumonia, respiratory failure, or Acute respiratory distress syndrome (ARDS)
  - Multi-organ system failure
  - Coagulopathy
  - Death

### DIAGNOSIS

- Viral tests (nucleic acid or antigen) are recommended to diagnose acute infection with SARS-CoV-2.
- Whether or not people can be reinfected with SARS-CoV-2 is still unclear. More data about the possibility of reinfection with the virus that causes COVID-19 after recovery from COVID-19 is needed. Antibodies, associated with recovery, have been detected in most recovered patients.

- Co-infections have been reported. Detection of another respiratory pathogen does not (and should not) rule out COVID-19.
- The American College of Radiology also does not recommend CT for screening or as a first-line test for diagnosis of COVID-19.

## LABORATORY AND RADIOGRAPHIC FINDINGS

- SARS-CoV-2 RNA has been detected from upper and lower respiratory tract specimens, and the virus has been isolated from bronchoalveolar lavage fluid.
- The duration of shedding of SARS-CoV-2 RNA in the upper and lower respiratory tracts is not yet known but may be several weeks or longer.

## CLINICAL MANAGEMENT AND TREATMENT

- There are no U.S. Food and Drug Administration (FDA)-approved drugs specifically for the treatment of patients with COVID-19.
- At present, clinical management includes infection prevention and control measures and supportive care, including supplementary oxygen and mechanical ventilatory support when indicated.
- Patients with mild clinical presentation may not initially require hospitalization.
- The decision to monitor a patient in the inpatient or outpatient setting should be made on a case-by-case basis.
- The [World Health Organization](#) and the [Surviving Sepsis Campaign](#) have both released comprehensive guidelines for the inpatient and ICU management of patients with COVID-19, including those who are critically ill.
- CDC has [Clinical Care Guidance for Healthcare Professionals about Coronavirus \(COVID-19\)](#), including [information for pediatric healthcare providers](#) and considerations for [newborns](#).

## THERAPEUTIC OPTIONS FOR COVID-19 PATIENTS

- There are no drugs or other therapeutics currently approved by the U.S. Food and Drug Administration (FDA) to prevent or treat COVID-19.
- Current clinical management includes infection prevention and control measures and supportive care, including supplemental oxygen and mechanical ventilatory support when indicated.
- The National Institutes of Health have published [interim guidelines for the medical management of COVID-19](#) prepared by the COVID-19 Treatment Guidelines Panel.
  - These guidelines contain information about investigational therapeutics.
  - These guidelines will be updated as new information emerges and drugs and other therapeutic interventions are approved for use by FDA.
- Persons seeking information about registered clinical trials for COVID-19 in the United States can search for such information at [ClinicalTrials.gov](#).

## CLINICAL INFORMATION ABOUT MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN

- On May 14, CDC released a [Health Alert Network](#) (HAN) Advisory on [Multisystem Inflammatory Syndrome in Children \(MIS-C\) Associated with Coronavirus Disease 2019 \(COVID-19\), which has been reported in the United States and Europe](#).
  - CDC collaborated with the Council of State and Territorial Epidemiologists to develop the case definition for MIS-C provided in this HAN.

- MIS-C has been described as inflammation across multiple body systems, potentially including the heart, lungs, kidneys, brain, skin, eyes, and gastrointestinal organs.
- Symptoms of MIS-C include fever and various body complaints such as abdominal pain, vomiting, diarrhea, neck pain, rash, conjunctivitis, and fatigue. Not all children will have the same symptoms.
- MIS-C may begin weeks after a child is infected with the virus that causes COVID-19. The child may not have shown symptoms and—in some cases—the child and their parents or caregivers may not even know they had been infected.
- Healthcare providers who have cared for or are caring for patients younger than 21 years old meeting MIS-C criteria should report suspected cases to their [local, state, or territorial health department](#).
  - After-hours phone numbers for health departments are available at the [Council of State and Territorial Epidemiologists website](#).
- For additional information, please contact CDC's 24-hour Emergency Operations Center at 770-488-7100 or submit a question using their [online form](#).
- CDC is collaborating with domestic and international partners to better understand this new syndrome, including how common it is and its risk factors, and to begin tracking cases.
  - CDC investigators hope that by assessing reported cases and the children's health outcomes, they may learn more about the risk and course of the syndrome in kids.
  - Several additional studies are planned to learn more about how the syndrome affects children and whether there are specific risk factors in addition to prior COVID-19 infection.
- CDC and its state partners will update recommendations as more is learned from monitoring MIS-C cases.

## GUIDANCE FOR BUSINESSES AND EMPLOYERS (NON-HEALTHCARE)

- [Interim guidance for businesses and employers](#) to plan for and respond to COVID-19 is now available on CDC's website. This interim guidance may help prevent workplace exposures to acute respiratory illnesses, including COVID-19, in non-healthcare settings.
- Employers can use strategies now to prevent workplace exposures to acute respiratory illness:
  - Actively encouraging sick employees to stay home
  - Separating sick employees
  - Emphasizing staying home when sick, respiratory etiquette, and hand hygiene by all employees
  - Performing routine environmental cleaning
  - Advising employees before traveling to take certain steps
  - Checking the [CDC's Traveler's Health Notices](#) website for the latest guidance and recommendations for each country to which you will travel
- Some people, like healthcare workers caring for COVID-19 patients and other close contacts of COVID-19 patients, will have an increased risk of infection.
  - Employees who are well but who have a sick family member at home with COVID-19 should notify their supervisor and refer to CDC guidance for [how to conduct a risk assessment](#) of their potential exposure. [Recommendations released March 16](#) state that if someone in a household has tested positive, keep the entire household at home.
  - If an employee is confirmed to have COVID-19, employers should inform fellow employees of their possible exposure to COVID-19 in the workplace but maintain confidentiality as required by the Americans with Disabilities Act. Employees exposed to a co-worker with confirmed COVID-19 should refer to CDC guidance for [how to conduct a risk assessment](#) of their potential exposure.
- Employers should be ready to implement strategies to protect the workforce from COVID-19 while ensuring the continuity of operations.

- An infectious disease outbreak response plan should include possible work-related exposures and health risks to employees. The plan should also explore flexible worksites (e.g., telecommuting) and work hours in accordance with human resource policies.
- Determine how you will operate if absenteeism spikes from increases in sick employees, those who stay home to care for sick family members, and those who must stay home to watch their children dismissed from childcare programs and K-12 schools.